

THE
NUMISMATIC CHRONICLE
AND
JOURNAL OF
THE ROYAL NUMISMATIC SOCIETY

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I.

THE INFLUENCE OF AGATHOCLES ON THE COINAGE OF MAGNA GRAECIA.

(See Plate I.)

OUR knowledge of the history of the Greek cities in the south of Italy is unfortunately all too scanty. Were it not for the abundance and beauty of their coinage we should probably regard as small places of little importance cities which were among the largest and most wealthy of their time. The period in their history with which this paper proposes to deal is the latter part of the reign of Agathocles, Tyrant of Syracuse, 304-289 B.C. At that time those cities had mostly sunk from their former glory. Tarentum, Velia, and Metapontum alone continued to issue coins in large quantities, while those of the other cities that had escaped the yoke of the Lucanians or Bruttians were striking money in small quantities only.

The Greeks of Southern Italy would seem at this period to have been threatened by three Powers: (i) The Bruttians and Lucanians; (ii) The Syracusans under Agathocles; (iii) The Carthaginians.¹ Their one hope of freedom lay in the opposing interests of these Powers.

¹ Rome might be suggested as a fourth threatening Power; but the Roman influence, though strong in Campania, was not as yet overshadowing the liberty of the southern Greek cities.

Agathocles was, during the whole of his reign, the determined enemy of Carthage, while the Bruttians were reckoned second only to the Carthaginians in the list of his foes. That there was at this time a Carthaginian sphere of influence in Southern Italy will be shown later, and in all probability the existence of a common enemy—Agathocles—united the Carthaginians and Bruttians against him.

Agathocles made his first serious advance in the direction of Italy in 304 B.C. when he suddenly fell upon and annexed the island of Lipara. In the following year Cleonymus, the Spartan, came to the help of the Tarentines in their quarrel with Rome. Diodorus, from whom we learn this, mentions two facts which bear upon this subject. First, that the Metapontines, contrary to their wont, were opposed to the Tarentines on this occasion; secondly, that Cleonymus had formed a notion of turning his arms against Agathocles of Syracuse. It is conceivable that Agathocles and the Metapontines were at that time allied; but more of this later.

In 298 B.C. we find the Syracusan tyrant master of the island of Corcyra. Three years afterwards² he made a treacherous attack on Croton, in which he placed a garrison. It was, however, in 294 B.C. that he organized his big expedition against the Bruttians. He himself commanded an army of 30,000 foot and 3000 horse, while his fleet laid waste the coast. He besieged and took the city of Hipponium, whose port he converted into a naval base for his fleets. The Bruttians sued for peace, which Agathocles granted after receiving 600

² The authority for this date—295 B.C.—is Holm. Some writers place the seizure of Croton two or three years earlier.

hostages.³ So much the historians tell us. What other cities fell under his sway, or what States contracted alliances with him, they do not mention. Apparently the tyrant himself considered his position in Italy firmly established, for he returned to Syracuse leaving his army in occupation. His mind was set on what he intended to be the great achievement of his life—the capture of Carthage. While he was preparing the great armament which was to carry out this scheme, the Bruttians suddenly rose, defeated his army, and regained their hostages.⁴ It is extremely probable that they had Carthaginian aid in this undertaking. For what better check on his plans against their city could there have been than a diversion created among his newly acquired possessions in Italy? The ruthless old tyrant⁵ did not live either to punish the Bruttians or to carry out his great scheme against Carthage. He died in the year 289 B.C.

The Syracusan coinage of Agathocles is distinguished by the appearance of the *triskeles*, the three-legged symbol, which is absent from all earlier issues as well as from all later ones down to Roman times. Hill, in his *Coins of Ancient Sicily*, has suggested "that the triskeles was originally the private signet of Agathocles, and that its adoption as the emblem of all Sicily belongs to a later date. . . . As a matter of fact, except on the coins of Agathocles, it is never or rarely found in Sicily save on coins of Roman date."⁶ His first coinage, bearing only the name of the Syracusans, has the triskeles in the field of the reverse [Pl. I. 1],⁷ as also has the second

³ Holm, *Geschichte Siciliens im Alterthum*, vol. ii. pp. 261-263.

⁴ *Op. cit.*, *ibidem*.

⁵ "Der alte Wüterich," as Holm calls him, *op. cit.*

⁶ Hill, *Coins of Ancient Sicily*, pp. 152, 153.

⁷ *B. M. Cat. : Sicily*, p. 192, No. 346-269-9 grains.

issue struck after his victory over the Carthaginians in Africa in 310 B.C. [Pl. I. 2].⁸ Contemporary with this last, as well as with the first, one must place the Corinthian staters struck in Syracuse with the triskeles in the field of the reverse [Pl. I. 3, 4].⁹ It may be objected that the absence of the tyrant's name would warrant their being placed only with the first issue of tetradrachms. But No. 4 has a trophy behind the head of Pallas on the obverse, which resembles the trophy erected by Nike on the reverse of the tetradrachm No. 2. Besides, in the case of an international coinage, such as these "*pegasi*" were, the tyrant would avoid giving offence by placing his name on them. The drachm and copper pieces [Pl. I. 5, 6, 7]¹⁰ should probably also be placed in this second period, since on these too the same trophy occurs behind the head of Apollo on the obverse.

Turning now to the coins issued under the influence of Agathocles in Magna Graecia, let us first take those struck by him at

HIPPONIUM.

Obv.—ΣΩΤΕΙΡΑ Head of Pallas r., wearing crested Corinthian helmet, on which griffin (or sea-horse, Scylla, or no device).

Rev.—[ΕΙΓ]ΩΝΙΕΩ[N] Nike standing l., wearing long chiton, holding wreath and sceptre; in field l. sometimes ΝΙΚΑ and crab; sometimes trophy of arms (or mark of value II).

Æ. Size 0·9" to 0·8". [Pl. I. 8, 9.]¹¹

⁸ *B. M. Cat.*: *Sicily*, p. 196, No. 379—247·5 grains (plated).

⁹ *B. M. Cat.*: *Corinth*, p. 99, 10—132·2 grains; 11—132·1 grains.

¹⁰ *B. M. Cat.*: *Sicily*, p. 193, No. 353—59·4 grains; and Nos. 354, 355.

¹¹ *B. M. Cat.*: *Italy*, p. 358, Nos. 7—11.

These copper coins must have been struck between the years 294 and 289 B.C. They have points of strong resemblance with the contemporary Syracusan pieces. Artemis and Pallas are each called ΣΩΤΕΙΡΑ at Syracuse and Hipponium respectively. In both cities we meet Doric forms ΚΟΡΑΣ and ΝΙΚΑ, and the same trophy occurs as symbol on the coins of both. The head of Pallas with the griffin on the Corinthian helmet is a direct copy of Agathocles' "Pegasi."

We know from history that the tyrant actually held Hipponium and Croton with garrisons. Strangely enough he has, so far as we know, left no mark on the coinage of the latter place. From a study of the coins we are able to supplement our scanty knowledge and to say that in all probability Agathocles, whether as suzerain or ally, has left his mark on the coins of three other cities, at least, viz.—Terina, Metapontum, and Velia.

TERINA.

Obv.—ΤΕΡΙΝΑΙΩΝ (or Ε). Female head to r. (or l.), wearing earring and necklace, hair rolled; behind neck, triskeles.

Rev.—Nike winged, wearing long chiton, seated l. on square cippus; r. hand holding bird (or caduceus); in field l., Ε (or Δ, or star).

Æ. $\frac{1}{3}$ stater or tetrobol, 36.1 to 26.6 grains.¹² [Pl. I. 10.]

Terina had fallen into the hands of the Lucanians in 365 B.C., and had changed masters, being occupied by the Bruttians nine years later. Alexander of Epirus afforded the city a brief respite in 325 B.C. The coins described above have often been assigned to the time of Dionysius

¹² *B. M. Cat.: Italy*, p. 393, Nos. 43–50. The coin on our plate is No. 43.

of Syracuse.¹³ In the new edition of *Historia Numorum*, however, Dr. Head says:—"The Thirds frequently have the Sicilian triskeles below the head of the city, showing them to have been struck under Sicilian influence, and perhaps as late as the time of Agathocles."¹⁴ But the most conclusive arguments for assigning these pieces to this period are advanced by Dr. Regling in his monograph on Terina,¹⁵ where he mentions three important facts:—(i) Following Hill, that the triskeles must be regarded as the personal signet of Agathocles rather than as the badge of Sicily at this period; (ii) That the style of these Thirds is extremely like that of Agathocles' tetradrachms [Pl. I. 1]; (iii) That the only hoard of coins ever found on the site of Ancient Terina consisted of copper coins of Agathocles. This last is a significant fact. On looking at the map one can well imagine that the city, which lay within sight of the port of Hipponium, would be forced to accept the rule of Agathocles, though it was perhaps euphemistically called an "alliance," or a "liberation" from the Bruttian yoke.

METAPONTUM.

Obv.—Bearded head of Leukippos r., wearing crested Corinthian helmet, around which laurel-wreath; behind the neck, ΔΙ.

Rev.—META Ear of barley with blade to r.; over it, triskeles with wings at heels; beneath it, ΦΙ.

Æ. Stater, 126·0 grains. [Pl. I. 11.]¹⁶

¹³ Head, *Hist. Num.*, Ed. I., p. 98.

¹⁴ *Ibid.*, New Ed., p. 113.

¹⁵ Pp. 56, 57.

¹⁶ Hunter Coll., Glasgow, *Catal.*, vol. i., Pl. vi. 19, and Carelli, *Num. Ital. Vet.*, Pl. cliv. 114. Two others are known: *Catal. Collection, Caprotti*, Milan, March, 1910, Pl. i. 193; and *Catal. Vente Hartwig*, Rome, March, 1910, Pl. iii. 223.

The head of Leukippos on this coin is undoubtedly the latest of the whole series¹⁷ with the oekist's head, being of poorer style than any of its predecessors. The Corinthian helmet—the only one of the group with a crest—may be compared with the crested helmets on our pieces of Syracuse and Hipponium [Pl. I. 3, 4, 8].

VELIA.

Obv.—Head of Pallas I., wearing crested Athenian helmet ornamented with curled wing; behind the head, K; in front, Φ.

Rev.—ΥΕΛΗΤΩΝ (in ex.). Lion walking l.; above Φ — I, between which triskeles with wings at the heels.

R. Stater, 115·7 grains. [Pl. I. 12.]¹⁸

It is remarkable that the triskeles, both on this coin, on the one of Metapontum, and on the silver drachm and copper pieces struck at Syracuse [Pl. I. 5, 6], have winged talaria on each of their feet.

Now, we have already seen very strong evidence at Terina of an occupation by—or at least of an alliance with—Agathocles, of which history has told us nothing. The triskeles on the coins is our clue to it. We must conclude that the tyrant's dominion in the peninsula was greater than any records we possess indicate. And when we meet with coins of two cities each with his special signet¹⁹ upon it—coins, moreover, whose style warrants

¹⁷ The earliest of the series with heads of Leukippos must be placed about 340 B.C., as the head is copied directly from the large Syracusan copper pieces of Timoleon's time with the head of the oekist Archias. The neck-piece of the Corinthian helmet which occurs on the "Archias" type is faithfully reproduced on this first "Leukippos" coin. Cf. *Catal. Vente Hartwig*, Rome, March, 1910, Pl. iii. 224.

¹⁸ *B. M. Cat. : Italy*, p. 314, No. 95.

¹⁹ It may be objected that in each case the triskeles is but one among

their being placed as late as the beginning of the third century B.C.—we may surely suppose that we have here the evidences of two other “alliances” contracted by the wily tyrant. The whole “foot,” excepting only the “heel,” of the Italian peninsula might be cut off by an imaginary line drawn across from Metapontum to Velia. With his garrisons at Croton and Hipponium, and those of his allies at Terina, Metapontum, and Velia, so long as his fleet held the sea Agathocles had Magna Graecia, outside the Tarentine sphere, in his power.

One other city was possibly also under the tyrant's influence—Locri. Here, however, the evidence is not strong. Bronze coins exist whose obverse type is either a laureate head of Zeus with ΔΙΟΣ in the field, or a head of Pallas in a crested Corinthian helmet, while the reverse consists of ΑΟΚ ΡΩΝ divided by a winged thunderbolt. Of these Dr. Head has written, “In their reverse types, style, and epigraphy the coins bear so close a resemblance to the money of Agathocles that there can be no doubt about their date.”²⁰ However, this similarity may be due as much to trade interests as to political influence.

a whole series of varying symbols on the staters of the two cities. But we have a parallel case at Athens where the signets of Antiochus IV and of Mithradates the Great (an elephant, and a star between two crescents, respectively) are placed upon the coins, each as one among a long series of other magistrates' symbols.

In passing, it is worth noting that in the vast series of Magna Graecian coins the triskeles is known to occur only on one rare coin of one other city beside the three—Terina, Metapontum, and Velia—mentioned here. That instance is a small silver piece, $\frac{1}{3}$ of a stater, of Caulonia, struck quite 150 years earlier. There the triskeles is the obverse type, and there it must in all probability be regarded as a variation of the same idea of motion as is typified by the small running figure on the outstretched arm of Apollo on the staters. On quite a late coin of Suessa Aurunca, struck under Roman dominion, a triskeles occurs. But Suessa Aurunca was not a Greek town.

²⁰ *Hist. Num.*, New Ed., p. 103.

Considering the extent of the power of Agathocles in Italy, it is with some surprise that one reads of the suddenness and apparent ease with which the Bruttians, who had been glad to accept a dishonourable peace, rose, defeated the tyrant's army of occupation, and regained their hostages. Probably they had outside help. Agathocles was preparing a great expedition against Carthage, in which two hundred ships were to take part. Evidently he must have reduced his Italian squadron, which kept open the communication between his various ports and allies, for this purpose. The Carthaginians knew where to strike, and they struck. They probably helped the Bruttians. Metapontum and Velia, the two allies furthest from Syracuse, might well be the first to throw off their allegiance to the tyrant and admit his enemies. Of each of these cities there exists a coin which may reasonably be assigned to this period.

METAPONTUM.

Obv.—Head of Demeter, of *Punic style and fabric*, l., wearing single earring and necklace; hair loose and crowned with barley. In front of neck, *three Punic letters* $\Sigma \Gamma \Theta$ = Hebrew נח .

Rev.—META Ear of barley with blade to l., altar with flame upon it; in field r., $\Upsilon \Lambda$.

R. Stater, 119·7 grains. [Pl. I. 13.]

E. J. Seltman Coll.

It is unexpected and somewhat astonishing to come across a stater of Magna Graecia with a characteristically Punic obverse with Punic inscription combined with a typically Greek reverse with Greek inscription. Being unacquainted with Semitic script or languages I submitted the coin to Mr. S. A. Cook, of Cambridge, whose

efforts in deciphering the obverse legend have been untiring and invaluable. After going carefully into the matter he has come to the conclusion that the letters can best be read נַע.

Now, a bilingual "IVth century inscription from Larnax Lapethus (in Cyprus) is to 'Ἀθηνᾶ Σωτείρα Νίκη,' and the Phoenician equivalent reads 'לֵנַת עַן חַיִּים'—'to Anath the refuge of the living.'"²¹ The second word of this legend נַע must be taken as equivalent to עַן.²² "Touching נַע; this is not found as a noun in Hebrew, nor could it be the participle of a verb; but the root 'to take refuge' is quite secure both in Hebrew and Arabic. As a noun it would be pronounced in Hebrew either 'āwez or 'ūz. The appearance of י in Phoenician to indicate simply a long ū is striking, and is an argument in favour of 'āwez (after the Hebrew) or a hypothetical 'awz. Do not forget that my pronunciation is quite tentative: Phoenician might have either form, or even a more original 'awz (*w* as a consonant not diphthong). Concerning this, Eusebius (*Pr. Ev.*, I. 10. 34—the ref. is second-hand) talks of a Phoenician deified 'Death' called 'Mout' or θάνατος . . . if we have a deification of 'Death' why not of 'Refuge,' 'Deliverance'? If so this sort of abstract idea would explain why we find here on the coin for the first time a noun נַע, whereas מַעֲזָה (mā'oz) is well-known in Hebrew as 'place of refuge.' I stick to נַע . . . and think your coin turns out—from my point of view—more interesting than ever."

²¹ This and the following sentences enclosed in quotation marks are from Mr. Cook's communications to me on the subject.

²² It must be pointed out that the letter י (vau), whose form should be 7, appears at first sight to look like 2 on our coin. But a close study of the coin convinces me that the lower horizontal bar is only a flaw of a lumpy and irregular form. Mr. Cook concurs in this opinion.

Now, in the inscription from Lapethus mentioned above the Greek Ἀθήνη σώτρεα is translated into the Phoenician "Anath the refuge." But "refuge" is a more abstract idea than "saviour." Supposing, now, one were translating from Phoenician into Greek and were seeking for a more literal rendering of 𐤀𐤓—"refuge," surely one would take the word σωτηρία rather than σώτρεα—"safety" rather than "saviour." The coin figured on Pl. I. 14, gives us the key.²³ It has the facing head of the same goddess as our coin treated in a similar manner. Above the head is written ΣΩΤΗΡΙΑ.

It is not suggested that the two pieces [Nos. 13 and 14] are contemporary—though they are not far apart in point of time. But apparently a Carthaginian garrison at some period near 300 B.C. held the citadel and mint of Metapontum, and put a Carthaginian engraver to work, who, taking a reverse that he found ready, made for it an obverse with the head of the patron goddess of Metapontum and of Carthage, and translated her impersonation of ΣΩΤΗΡΙΑ into 𐤀𐤓—"safety" into "refuge."

VELIA.

Obv.—Head of Pallas r. wearing crested Athenian helmet ornamented with curled wing; behind the head, Φ; above, Γ.

Rev.—ΥΕΛΗΤΩΝ (in ex.). Lion walking l., head nearly facing; beyond, date-palm, on either side of which, Φ — l.

R. Stater, 106·8 grains (worn).

[Pl. I. 15.]²⁴

²³ *B. M. Cat.: Italy*, p. 257, No. 144—120·9 grains.

²⁴ *Ibid.*, p. 314, No. 99.

It is evident that this piece is almost contemporary with No. 12 on Pl. I. with the triskeles over the lion. The treatment of the head of Pallas on one coin and the other is identical, even down to the curled wing on the helmet. The observation that this coin has its prototype in the famous tetradrachm of Siculo-Punic issue with the head of "Dido" in the diademed Phrygian cap²⁵ is no new one. And it must be borne in mind that the date-palm is as much the special mark of Carthage²⁶ as the triskeles is of Agathocles. It is improbable that a coin-engraver of a free Greek city would make so slavish a copy of the coin of a "barbarian" city of his own free will, or place the badge of Carthaginian dominion on it merely by way of varying his type. Also, be it noted, there is no other symbol on the coin. The date-palm of Carthage has taken the place of the triskeles of Agathocles.

Is not the simplest and most straightforward explanation the one already suggested above; that the Carthaginians, probably encouraged by a reduction of his Italian squadron, attacked and invested Metapontum and Velia, two of the most powerful cities allied to Agathocles, and thereby struck a telling blow at his power in Magna Graecia?

CHARLES T. SELTMAN.

²⁵ See Hill, *Coins of Ancient Sicily*, Pl. x. 7; also *B. M. Guide*, Pl. 26, 41, 42.

²⁶ The date-palm (Φοῖνιξ) was, of course, to the Greek the most natural symbol of the Phoenician (Φοίνιξ). Its adoption as a canting-type on the Punic coins of Sicily simply shows that the Carthaginians who issued them realized the pun contained in the Greek words. There is no word in the Semitic languages for the date-palm which could suggest any play upon Phoenicia or Carthage. In this connection note the fairly analogous case of the elephant (which the Romans knew was called "Kesar" in Phoenician) being placed on the denarii of Julius Caesar.

P.S.—Sir Arthur Evans has expressed the view that the coin of Metapontum with the head of Punic style [PL. I. 13] has a Greek rather than a Phoenician legend on the obverse, which he reads $\Xi\Xi\Delta$. On the other hand, Professor Margoliouth of Oxford and Canon Cooke of Rochester, besides Mr. S. A. Cook of Cambridge—all specialists in Semitic languages—have read the three letters as Phoenician. The upper stroke of the middle letter seems to me conclusive. Incidentally, the piece would not be the first example of a bilingual coin struck among the Western Greeks. In the collection of Comte Franz von Wotoch sold in Paris in December, 1901 (Catal. Sambon and Canessa, p. 25, No. 239, fig.) there occurred a Syracusan tetradrachm resembling Du Chastel, No. 51, with $[\Sigma\text{VPAK}]\text{O}\Sigma\text{IO}[\text{N}]$ as usual around the head. On the reverse over the horses are the letters $\gamma'z$, “ziz.” The parallel is striking, since in each case the original name of the city has been retained in Greek on one side, while on the other a Phoenician legend has been added.

C. T. S.

II.

TWO HOARDS OF COINS OF KOS.

(See Plate II.)

A SMALL hoard of third-century drachmas of Kos recently came into my possession. I obtained it from Smyrna, but have no information as to the locality where it was found. It comprises twenty-one coins, all of the series [B.M.C. 76/83]—

Obv.—Bearded head of Herakles r., wearing lion's skin.

Rev.—Crab: above, ΚΩΙΟΝ; below, club and magistrate's name.

The magistrates' names, with the sizes, weights, and position of dies of the individual specimens, are as follows:—

1.	ΙΕΡΩΝ	. . .	15 mm.	3.15 grs.	↑↓	[Pl. II. 1.]
2.	„	. . .	16 „	2.88 „	↑↘	[Pl. II. 2.]
3.	„	. . .	15 „	2.77 „	↑↓	[Pl. II. 3.]
4.	ΚΑΛΛΙΠΠΙΔ[ΑΣ]		15 „	2.87 „	↑↑	[Pl. II. 4.]
5.	ΝΙΚΑΓ●ΡΑΣ	. . .	15 „	2.95 „	↑↑	[Pl. II. 5.]
6.	„	. . .	14 „	2.93 „	↑↑	[Pl. II. 6.]
7.	„	. . .	16 „	2.94 „	↑↑	[Pl. II. 7.]
8.	„	. . .	16 „	3.09 „	↑↑	[Pl. II. 8.]
9.	„	. . .	15 „	2.86 „	↑↑	[Pl. II. 9.]
10.	ΦΙΛΙΝΟΣ	. . .	15 „	2.89 „	↑↑	[Pl. II. 10.]
11.	„	. . .	15 „	2.97 „	↑↑	[Pl. II. 11.]
12.	„	. . .	15 „	2.81 „	↑↑	[Pl. II. 12.]
13.	„	. . .	15 „	2.98 „	↑↑	[Pl. II. 13.]

14.	ΦΙΛΙΝΟΣ	. .	15 mm.	3.13 grs.	↑↑	[Pl. II. 14.]
15.	„	. .	17 „	2.86 „	↑↑	[Pl. II. 15.]
16.	„	. .	16 „	2.67 „	↑↑	[Pl. II. 16.]
17.	„	. .	15 „	2.79 „	↑↓	[Pl. II. 17.]
18.	„	. .	16 „	2.48 „	↑↑	[Pl. II. 18.]
19.	ΝΙΚΑΓΟΡΑ	[. . .	15 „	3.16 „	↑↑	[Pl. II. 19.]
20.	ΑΔΑΜΟ	[. . .	15 „	2.70 „	↑↓	[Pl. II. 20.]
21.	ΠΑΤΙ	[. . .	16 „	2.73 „	↑↑	[Pl. II. 21.]

The name on 19 is most probably to be restored as ΝΙΚΑΓΟΡΑΣ; that on 20 is more open to conjecture, but it might be ΑΡΧΙΔΑΜΟΣ, which is a known Koian name. The reading of the remains of the letters on 21 is very doubtful. If they are correctly given above, the name may be ΚΡΑΤΙΔΑΣ, which is found in a third-century inscription of Kos (Paton and Hicks, No. 10, c. 70 and d. 43). It should be noted that on the reverse of 2 the ethnic is lower in the field than usual, and is divided by the claws of the crab thus, Κ ΩΙΟ Ν.

The chief interest of the hoard arises from a comparison of the dies used. This gives the following results:—

1 (of Hieron) and 17 (of Philinos) are from the same die (obv. and rev.).

4 (of Kallippidas) and 10, 11, and 12 (of Philinos) are from the same obverse die: of these 10 and 11 are also from the same reverse die.

5 (of Nikagoras) and 13 and 14 (of Philinos) are from the same obverse die; 13 and 14 are also from the same reverse die.

5, 6, and 7 are from the same reverse die; 6 and 7 are also from the same obverse die.

15 and 16 are from the same reverse die.

In the first place, it is clear from the number of examples from the same dies in this small hoard that

the number of dies in use at Kos at this period, and presumably therefore the number of coins issued, must have been comparatively small.¹

More important, however, is the clue given by the dies to the sequence of the magistrates. A close examination of 1 and 17 shows that the obverse die was more worn when used for 1 than when used for 17. Similarly, 4 was struck when the obverse die was more worn than in the case of 10, 11, and 12. Hence it appears that both Hieron and Kallippidas used the old obverse dies of Philinos. The sequence of the coins of Nikagoras and Philinos is even clearer. Not only does 5 show a fresher state of the obverse die than 13 and 14, but it appears from comparison of the reverses of 5, 6, and 7, that 5 was the latest struck of the three: 6 is the earliest, and on 7 a flaw in the reverse die begins to show, which is still more marked on 5. The conclusion is that 6 and 7 were struck from the same dies, after which the obverse die failed (there is a slight suggestion of a split developing in the die on the obverse of 7), and a new obverse die was used for 5 which lasted out the term of office of Nikagoras and was handed over to Philinos.

It may be considered that the latter part of the above argument is rather hypothetical, and might be weakened if it were assumed that the dies were not used in regular succession. But in any case there seems to be sufficient evidence from the dies that Nikagoras preceded Philinos,

¹ I have not invited any mathematician to undertake the intricate work of calculating the probable number of dies used; but I would refer for comparison to my paper on "Alexandrian Tetradrachms of Tiberius" in the *Numismatic Chronicle* for 1910, p. 383. In the hoard discussed there I found two pairs from the same obverse and reverse dies out of 136 coins; in the present hoard there are three pairs out of 21 coins; *i.e.* nearly ten times as many pairs in proportion to the total number of coins.

probably immediately, and that Philinos preceded Hieron and Kallippidas.

The fact that both the last-named magistrates used the old obverse dies of Philinos raises a difficulty as to their order of office. Unless there were two eponymous magistrates for monetary purposes at the same time—which is scarcely probable at this period in so small a state as Kos—it would appear that an obverse die of Philinos was not worn out during the magistracy of his successor, and was brought into use again in the next term. There might be various reasons to explain this: the old die may have been put away or lost and then discovered again: the immediate successor of Philinos may have held office for a very brief time, or his issue of coins may have been so small, even during a year, as not to wear out all the old dies. Perhaps some ground for the last-mentioned hypothesis may be found in the fact that there are only three coins of Hieron in the hoard, and only one of Kallippidas, against nine of Philinos and five of Nikagoras. These comparative numbers may of course be due to chance; but, to judge from published examples, the coins of Philinos are about the commonest of the series, while I have not found any previous record of those either of Hieron or Kallippidas.

There is a minor point of interest in the fact that the only coin of Philinos struck with the dies in the position $\uparrow\downarrow$ is from the obverse die which was afterwards used by Hieron, and that Hieron's coin from this die, and one of his other two, were struck with the dies similarly placed, while his third (which has a slight variation in the reverse legend, as noted above) has the dies at an obtuse angle. All the other coins in the hoard, except that of [Archidamo[s?], have the dies arranged $\uparrow\uparrow$.

There is, unfortunately, no evidence as to the position held by the magistrates whose names appear on the coins of Kos. For ordinary purposes of dating, the eponymous magistrate at Kos was the *μόναρχος*; and it is fairly reasonable to suppose that the coins were similarly dated by his name; although, as the object of the inscription on the coin was probably not so much to date it as to fix the responsibility for it on the issuing magistrate, who may not have been the monarch, the possibilities of other explanations of the name are considerable.

If the names are those of monarchs of Kos, it is worth while to note that in an inscription from Kalymna (*B.C.H.*, viii. 29), which gives a catalogue of the members of some body, with their years of birth dated by magistrates whom Mr. Paton (*Inscriptions of Cos*, p. 352) has shown to be of Kos, and probably monarchs, the names of the magistrates Nikagoras and Philinos occur: moreover, the catalogue is classified in age-groups, and the persons born in the years of Nikagoras and Philinos are *πάρθενοι* or *ἄνῃβοι*; in other words, these two magistrates' terms of office fell within about sixteen years of the date of the inscription.

It would, however, be hardly safe to date the coins of Nikagoras and Philinos on this doubly hypothetical basis, especially as the Kalymnian inscription is placed by Mr. Paton about 290 B.C., or over a century earlier than the period usually assigned to this series of coins; also, the names of Hieron and Kallippidas do not occur amongst the eponymous magistrates of the inscription, though their absence might be explained on the supposition that they held office after the catalogue was compiled, while Nikagoras and Philinos might have been monarchs just before that event. In fact, these two

names—Nikagoras and Philinos—were such common ones in Kos, that there may have been several magistrates with either name.

At the same time, I am inclined to think that the date usually given to these coins—*circa* 190–166 B.C.—is somewhat too late, and that on grounds of style they should be put back into the third century.

A second hoard, of third-century copper coins of Kos, subsequently came into my possession through the kindness of Mr. Edward Barff of Smyrna. These belong to the series which is usually regarded as preceding the silver coins described above, with the types [B.M.C. 103/110]—

Obv.—Head of Herakles l., beardless, wearing lion's skin.

Rev.—Crab: above, ΚΩΙΟΝ; below, club and magistrate's name.

The individual coins were struck by the following magistrates:—

1. ΠΠΑΡΧΟΣ	. .	15 mm.	2·15 grammes
2. „	. .	14 „	1·75 „
3. „	. .	15 „	2·48 „
4. „	. .	15 „	2·27 „
5. ΣΙΜΟΣ	. . . .	15 „	2·45 „
6. „	. . . .	14 „	2·77 „
7. „	. . . .	15 „	2·69 „
8. „	. . . .	15 „	2·56 „
9. ΦΙΛΙΣΤΗΣ	. . . .	15 „	2·27 „
10.]ΑΜΙ[ (?)	. . . .	14 „	2·20 „

The position of the dies is in all cases but one approximately ↑↑, a slight deviation to the right being shown in Nos. 2, 3, 4, and 8, and to the left in No. 9; in No. 10 the dies are placed ↑↓.

All the coins are from different reverse dies, but the same obverse die was used for Nos. 1, 5, and 6, and for Nos. 2 and 3. It is clear, from a comparison of Nos. 1, 5, and 6, that the die was more worn when the two coins of Simos were struck than when that of Hipparchos; presumably, therefore, Simos succeeded Hipparchos as monetary magistrate of Kos.

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III.

THE ARTISTIC ENGRAVERS OF TERINA AND THE SIGNATURE OF EVAENETOS ON ITS LATER DIDRACHM DIES.

(See Plates III.-V.)

§ 1. THE WORKS OF Φ AND Γ: ATTIC INFLUENCES AND THE SCHOOL OF ZEUXIS.

THE study of the coinage of Terina has been recently placed on a new basis by the admirable and exhaustive monograph of Dr. Regling, which in many ways may be regarded as a model for this kind of research.¹ The greater accessibility of the material secured by this work makes the occasion favourable for reconsidering some of the current views concerning the master-pieces of the Terinaean Mint, and their place in contemporary art history, both numismatic and general.

Moreover, an additional motive for attempting this has been supplied by the interesting discovery—to which attention will be directed in the second Section of this

¹ "Terina," *Sechshundsechzigstes Programm zum Winckelmannsfeste*, von Kurt Regling (Berlin, 1906). Dr. Regling's work has been the subject of a singular attack on the part of two of his colleagues, Messrs. H. von Fritze and H. Gaebler in *Nomisma* (i. pp. 14 *seqq.*). For examples of obliquity of archaeological judgment, and for the preposterous chronological conclusions in which these writers have thus involved themselves, reference may be made to the note at the end of this paper.

paper—that the signature of the great Syracusan engraver Evaenetos must now be added to those that appear on the civic dies. The new point of departure thus gained will be seen at once to have a retrospective bearing on the whole subject of artists' signatures on the coinage of Terina.

One question which suggests itself at the outset is whether sufficient attention has been paid in recent years to the extraordinarily large pictorial element in the finest designs on these dies, and on the closely allied types executed by Φ at Pandosia.

Since the appearance of Mr. R. S. Poole's masterly paper "On the Athenian Coin Engravers in Italy,"² few have failed to recognize the influence of Attic models on a series of coins of Terina struck during the last quarter of the fifth century B.C. The connexion with the new Athenian foundation of Thourioi is established by the work of the engraver whose signature, Φ , reappears, together with the same distinctive style on the dies of Terina.

The Attic element in Φ 's work so strongly impressed itself on Dr. Furtwängler, that he has given expression to the opinion³ that the style of this artist, especially as shown in the seated Nikê Terina, "resembles in an altogether surprising and unmistakable way the Parthenon frieze. He must have stood in the closest relation to the sculptor of the frieze—to Phidias himself." Mr. Poole, referring to the master-piece of the artist, compares the way in which the figure of the Nymph seated on the overturned hydria [Pl. III. 4]⁴ is seen beneath the

² *Num. Chron.*, 1883, pp. 269 *seqq.*

³ *Meisterwerke*, pp. 144, 145.

⁴ *Regling, op. cit.*, Nos. 29, 30 (R.S. -γγ).

drapery with the reliefs of the balustrade of the Temple of Nikê Apteros, which also stand in such a near relation to a type of the contemporary Terinaean engraver Π.

The appreciations of these fine judges of Greek art have, doubtless, a permanent value, but it seems to me that such a design as that seen in **Pl. III. 4**, with the Nymph on the urn, is suggestive rather of the painter's than the sculptor's methods. Here it is the instantaneous element that first strikes the eye. The Nymph, literally poised on the overturned hydria, her drapery drawn back by the breeze and fluttering behind, the little bird just perched on the back of her hand with its wings half spread—never surely was a more pictorial composition introduced into the field of a coin! Indeed, *mutatis mutandis*, the figure with its clinging drapery and legs drawn back, balanced as it were on the round boss of the urn, evokes points of sympathetic comparison with that most poetical creation of the modern painters' craft, Watts's "Hope."

This exquisite design, moreover, leads us to another, almost equally pictorial in character, on a coin [**Pl. III. 5**],⁵ the obverse type of which is also the signed work of Φ. The whole background of this is occupied with a wall, its large isodomic blocks clearly marked, which, from the lion's head with its spouting water seen on one side, is clearly a reservoir (δεξαμενή). In front of this the local Nymph, seated on the square base, receives the water in her hydria—securing her equipoise, the while, by throwing out behind her the left arm, in which she holds a herald's staff. Between her and the reservoir wall is a square basin on which a swan is swimming. In the narrow space above the wall appears

⁵ Regling, *op. cit.*, No. 34 (S. -ζζ).

the inscription ΤΕΨΙΝΑ.. in small finely engraved characters.

The swan here may in some sort be regarded as the zoomorphic equivalent of the Water Nymph. At Kamarina we see the local Nymph riding on the swan, and the swan on the ampyx of a female head by Evaenetos on a tetradrachm of Syracuse probably indicates that it is the Nymph Arethusa who is there portrayed.

The riddle of the piece is supplied by an inscription, engraved, in fine, almost imperceptible letters like ΤΕΨΙΝΑ . . above, on the cippus beneath the seated figure. A comparison of several specimens shows that the true reading is clearly

A
 7
 H

The uppermost letter is somewhat irregular, and the 7 is written backwards like the 9 of ΤΕΨΙΝΑ . . . The letters, moreover, both in size and fineness of engraving, correspond with those of the other inscription.

This reading of the inscription at once eliminates the explanations founded on the erroneous versions ΑΓΗ or ΑΛΗ. With regard to the meaning of ΑΓΗ, two main theories have been propounded—

1. That it refers to some local source or its divinity.
2. That we have here the abbreviated name of an engraver with some such name as ΑΓΗΣΙΑΣ.

Lenormant, in his *Grande Grèce*,⁶ following Mannert, has given good reasons for identifying the river Okinaros, which, according to Lykophrôn, ran into the sea by

⁶ T. iii. p. 100 *seqq.* (see also *Gazette Archéologique*, 1883, p. 281 *seqq.*).

Terina, with the Fiume di Sambiasi,⁷ or Fiume dei Bagni, which flows past the destroyed town and former monastery of Santa Eufemia. This stream derives its name from the neighbouring sulphur springs, the Bagni di Sambiasi, still famous till at least the sixteenth century, for their healing qualities.⁸ But, from the distances supplied by the Itineraries, these springs precisely correspond with the station Aquae Angae, and Lenormant acutely suggested that the Latinized name of the source is only another version of the ΑΓΗ recorded on the coin. The view that Santa Eufemia is the local representative of Terina itself receives corroboration from the fact that bronze coins of Terina are constantly discovered there.⁹

It has indeed been urged that such an inscription inserted in inconspicuous letters in a part of the design presents all the distinguishing characteristics of an artist's signature. This view was accepted by Raoul Rochette,¹⁰ who had not, however, Lenormant's

⁷ The local form of San Biagio.

⁸ Barrius, *De Antiquitate et Situ Calabriae*, Romae, 1571, p. 137 (Frankfort ed., 1600, p. 1060): "Est in agro hoc Blasium pagus . . . balneis nobilibus, aqua sulfurea est qua multis medetur morbis."

⁹ I myself possess a batch of these from this locality. The frequent discovery of bronze coins, which had a more limited circulation, always supplies a better topographical clue to the sites of autonomous cities than do those of more precious materials. Pais ("Atakta," *Annali delle Università Toscane*, xix. 1893) has put forward (pp. 16, 17) the somewhat singular theory that, while Sta. Eufemia represents the harbour town of Terina, the real city is to be sought at Tiriolo, twenty-five kilometres inland. He deduces this from the fact that Thucydides (vi. 104, 2) apparently speaks of the Terinaean Gulf as on the coast of the Ionian Sea. He adds that "the Museum of Catanzaro is the Museum of Terina." But a consensus of ancient authorities places the Sinus Terinaeus on the west coast of what is now Calabria. Pais' theory involves the very improbable supposition that the harbour town of Terina was not situated on its gulf.

¹⁰ *Lettre à M. le duc de Luynes sur les Graveurs de Monnaies Grecques* (1831), pp. 43, 44. The counter-theory with which Raoul Rochette

identification before him. It has since been re-asserted by Pais,¹¹ and adopted by Regling in his recent monograph on the Coinage of Terina.¹²

It is quite true that from its insertion on a part of the design, and from its small dimensions, the inscription conforms to the class of artists' signatures. But at the same time, the fact must not be overlooked that inscriptions supplying the names or epithets of divinities do occur on coins in similar positions and in equally small characters. The coinage of Metapontion supplies a series of examples of such descriptive titles minutely written on the truncation of the necks of the obverse heads, such as ΕΥΓΕΙΑ , ΝΙΚΑ , ΑΓΟΛ , alternating with signatures of engravers in the same position. At Katanê, too, we find a similar parallelism in the two classes of inscriptions.

On the other hand, as already noted, so far as the style and size of the letters go, no distinction can be drawn between the characters on the base and those of the ΤΕΡΙΝΑ .. above. In both cases they are small and fine; indeed, it looks as if the artistic sense of the engraver revolted against any too conspicuous lettering of any kind. The ΑΓΗ is thus on all-fours with the other inscription, and, as shown above, the fact that it is engraved on a part of the design, is not of itself conclusive. Under these circumstances, Lenormant's suggestive comparison between ΑΓΗ and the ΑQVAE

had then to deal was that of Millingen (*Ancient Coins of Greek Cities*, p. 43, &c.), founded on a wrong interpretation of Ἀγῆς in Lykophrôn (Rathgeber, *Grossgriechenland und Pythagoras*, p. 6, and *Tzetzes*, s.v.).

¹¹ *Op. cit.*, p. 14, n. 1.

¹² *Op. cit.*, p. 39: "An so verborgener Stelle wird eine erklärende Beischrift nicht angebracht."

ANGAE of the Itineraries, on the site of the once celebrated sulphur baths of Sambiase, may still be considered to hold the field.

In this connexion the character of the type itself does not seem to have been sufficiently taken into account. The type cannot be looked on as merely containing an allusion to some more or less inconspicuous local spring, the rocky haunt of an eponymous Nymph. Rather it is the most exhaustive glorification of an architecturally arranged bath-station to be found in the whole range of the autonomous Greek coinage. Its features are far more fully indicated than those of the celebrated hot baths of Himera. It is also to be observed that in addition to the massive walls of the reservoir and of the lion's head-spout from which the water rushes into the urn, the swan swimming on the little tank below conveys the idea of a much larger artificial basin for bathing purposes. A swan does not swim in a trough.

There is another difficulty in the way of regarding ΑΓΗ as an engraver's signature, which must not be overlooked. The other accepted signatures, Φ and Γ, recur on a series of types, and are occasionally coupled on opposite sides of the same piece; but there is nowhere else any trace either of ΑΓΗ or of its initial letter. At the same time, the pictorial character of the design harmonizes with that already described, in which the Nymph is seen seated on the hydria, and as in both cases its obverse type bears the signature Φ, there is good ground for ascribing them both to the same numismatic artist. The resemblance in style would be even greater were it not for the unfortunate fact that all the reverse types known bearing the inscription ΑΓΗ are from a die with a flaw which has blurred the face of the Nymph and obliterated

the outline of the wing behind with a harsh transversal line. The characteristic effect of the wing curving forward like a halo in front of the head is thus destroyed.

Without denying the influence of sculpture, it must be said that the prevalent characteristics of both the above types are of the pictorial order. In the case of the design with the source the whole background is full of detail to an extent which certainly would not be found in any contemporary work of architectural relief. It is true that in later Hellenistic times, when the painter's methods had gained a much greater hold on sculpture, parallels might be found for this varied treatment of the background. But in the last quarter of the fifth century B.C., to which this coin belongs, such a phenomenon would have been non-existent.

When we remember that precisely at this period Zeuxis made Krotôn, the mother city of Terina, the centre of his activities, and was engaged in decorating the panels of the Temple of Hêra Lakinia with a series of designs, amongst them the celebrated Helen, it is difficult not to accept Lenormant's view that the markedly pictorial style of these and other more or less contemporary types of this part of Magna Graecia was due to the influence of the great Italiote painter. The facing heads of Hêra Lakinia that appear both on the coins of Krotôn itself and of its daughter city Pandosia, are not improbably taken over from some well-known painting on the temple walls. Equally pictorial are the reverse types with which they are associated—the seated Herakles in the one case and the Pan in the other.

The tendency to facing delineations illustrated by the head of Hêra and the seated Pan, and the evolution of the

butting bull on the later didrachms by Φ at Thourioi is, of course, a symptom of a tendency that becomes very general on the dies both in Magna Graecia and Sicily during the last years of the fifth century. That this was a characteristic of Zeuxis' method may be inferred from the fact that he seems to have carried *chiaroscuro*,¹³ so indispensable for such representations, to a higher pitch than had yet been attained even by his master Apollodôros. When we remember that Kimôn, who brought this process to such perfection for the Syracusan Mint, apparently began his career on the Italian side,¹⁴ it seems highly probable that this fashion in numismatic art went hand in hand with the dominant school of painting of which Krotôn supplies the richest illustration.

The exquisite didrachm of Pandosia [Pl. III. 6] has a special bearing on our present subject, since the Φ seen in the field of the reverse, showing the seated Pan, may with some probability be identified with the artist whose signature is found on the above-mentioned coins of Terina. The style of the piece is slightly later, and the head of Pan turned three quarters round, in sympathy with that of the Goddess on the obverse, is itself a more advanced characteristic. The whole group, with the dog at the foot of rock, on which the young God rests, looking back with a sudden alertness in the same direction in which his master gazes, is extremely picturesque. In the case of a third stater, in which this type is varied [Pl. III. 7], the instantaneous element

¹³ Quintilian, xii. 10: "Luminum umbrarumque invenisse rationem Zeuxis traditur."

¹⁴ In my *Syracusan Medallions*, pp. 75, 76, I have shown that the facing heads on the coins of Neapolis are the prototypes of Kimôn's "Arethusa."

in the design is still more marked—two hounds being seen on either side in the act of springing forward, as if just released from the leash. The picturesque effect is heightened by an engraved background covering the whole lower field of the coin.

Upon this and another kindred sixth stater of Pandosia [Pl. III. 8] the inscription ΝΙΚΟ is seen in small letters in the field, and probably represents a magistrate's name. It is possible that an inscription hitherto misread, which is engraved in small characters on an ithyphallic term seen in front of the seated Pan on the didrachm, may have the same explanation. A microscopic study of this inscription as seen on the fine specimen of this piece in the British Museum—in which I received the valuable help of Mr. G. F. Hill—has enabled me to establish the identity of most of the letters with certainty. The reading suggested in the B.M. Catalogue, “-ΜΑΛΥΣ,” is clearly erroneous. The five last letters form -ΑΛΛΩΝ, only a part of the transverse stroke of the final Ν being visible, however. The first letter is very difficult to decipher, but it shows part of a circular outline, and has the appearance of a Φ or possibly Θ, thus giving ΦΑΛΛΩΝ or ΘΑΛΛΩΝ. If the former reading be correct, the “term” may be regarded as a “canting badge.”

These picturesque versions of the seated Pan have a special interest in the present connexion, since Pan was the subject of the “priceless” picture that Zeuxis presented to his patron, King Archelaos of Macedon. There can be little doubt, moreover, that the somewhat later type, showing the infant Herakles strangling the two serpents, which was also the federal type of the league formed by Krotôn against Dionysios of Syracuse about 399 B.C., was adapted from the central episode

of Zeuxis' equally celebrated work, the Alkmênê and Amphitryôn.¹⁵

In the works of Φ we are bound to recognize the influence of this Italiote school of painting, without at the same time losing sight of the facts that Zeuxis himself was a native of the joint Tarentine and Thurian colony of Herakleia,¹⁶ and himself, therefore, not improbably of Athenian extraction, that he had worked himself at Athens, and was in every way imbued with the traditions of Attic sculptors.

When we come to consider the dies of the contemporary Terinaean engraver who signs himself Γ, and who is so closely associated with Φ, the comparisons evoked by his designs lie more clearly in the field of sculpture than of painting. There is less here of the instantaneous element, nor have we any pictorial backgrounds comparable to that of the Nymph at the fountain. The hydria or even the throne as a resting-place for the seated figure is now finally discarded in favour of the stone altar or cippus. Even his standing figures are built on statuary principles. In one case the Nymph [Pl. III. 9]¹⁷ leans one elbow on a column. In the other well-known pose she places her foot on a rock and rests in turn her elbow on her knee.

¹⁵ In 394 the same subject was chosen for the federal type of the league formed after the battle of Knidos: cf. Waddington, *Rev. Num.*, 1863, p. 223 *seqq.*; Regling, *Z. f. Num.*, xxv. 210 *seqq.*

¹⁶ The claims of Herakleia Pontica must certainly be rejected. The centre of gravity of Zeuxis' activity was clearly on the Magna Graecian side. He worked, moreover, in Sicily, witness his Alkmênê at Agrigento. The tradition that he was a pupil of Dêmophilos of Himera again points to a Western origin.

¹⁷ Regling, *op. cit.*, No. 37 (TT-u). The example given here is from my own collection (formerly Consul Weber's), wt. 7.46 grammes. The signature of Γ occurs on both sides—on the reverse in a minute form to the right of the column.

Since the time of Mr. Poole's essay on "The Athenian Coin Engravers in Italy," it has been generally admitted that the last-mentioned type reflects the strong influence of the kindred subjects on the balustrade of the Temple of Nikê Apteros, "though not necessarily of a particular work."¹⁸ The criticism that has been recently urged,¹⁹ that the scheme itself, as seen in the sandal-binder, occurs already in mature archaic art—as in the case of the Orestes of a Melian terracotta relief and of the figure in the inner field of a red figure *kylix* by Duris—seems to me to be beside the mark. What we have to deal with here is not merely the coincidence of scheme, but the sympathy of style and treatment, the modelling of the figure beneath the drapery, the curving forward of the wing, the suggestion of rhythmic motion. That the scheme itself under one or other form was fashionable about this period can be gathered, *inter alia*, from other coin-types, such as the young river-god of Segesta or the Hermes of Sybrita in Crete. But the correspondence with Attic models visible in the subject as presented by Γ at Terina goes far beyond mere generalities. Apart too from the more purely pictorial and instantaneous elements, the same influence is unmistakable in Φ's compositions, and notably in his consummate art of indicating the limbs beneath the drapery. We have further to remember, as a link of connexion with the cult of Nikê Apteros, that though the winged civic deity seen on the reverse of the great

¹⁸ *Num. Chron.*, 1883, p. 276. Regling (*op. cit.*, p. 45) points out that the influence of the balustrade on the coin-types of Terina fits in with the approximate date of that work, whether we accept Kekulé's view (*Reliefs*, p. 26) that it was executed soon after 432, or Furtwängler's (*Meisterwerke*, pp. 211–220), assigning it to the period 425–423 B.C.

¹⁹ H. von Fritze u. H. Gaebler, *Nomisma*, 1907, p. 21.

bulk of the Terinaean coins presents many attributes of a Nymph, she has others, like the olive-wreath and caduceus, which were appropriate to Nikê,²⁰ and that the wingless figure of the more archaic coins is coupled with the legend ΝΙΚΑ, and is, in fact, the Wingless Victory.

Apart from the suggestive reaction, indicated above, of the master-pieces of contemporary sculpture and painting on designs executed by Φ and Γ for the mint of Terina, there seems to me to be very strong evidence that this influence of the great art centres of Mainland Greece in part reached Terina from a numismatic source. The coins of Elis, rich beyond all others in variations of the Victory type, afford manifold materials for comparison, and one of the finest of these, representing the well-known design [Pl. III. 12], that Pistrucci chose as his model on the Waterloo Medal,²¹ stands in a very near relation to some closely allied reverse types of Terina, in some cases presenting the signature Γ.²²

This type is at home at Elis, where it descends from a more archaic version; at Terina it comes in suddenly as an imported design.

On the Eleian piece in question the wings of the Nikê are spread in such a way as to supply a remarkable

²⁰ See, especially, Regling, *op. cit.*, p. 97.

²¹ In exhibiting this stater of Elis to the Society on March 17, 1910, I referred to the close parallelism of the Victory on the reverse with that seen on these Terinaean coins (*Num. Chron.*, 1910, Proceedings, p. 16). Milani (*Römische Mitth.*, v. p. 99) had already made the general observation (though without specifying any particular type) that the seated figure on the Terinaean coins was closely related to that on the coins of Elis, and that its prototype should perhaps be sought there.

²² In two cases (Regling, *op. cit.*, Taf. ii. ψ, ω) the obverse types of this series are signed Φ, but the reverse does not seem to present a signature. In another case (*op. cit.*, ηη) the obverse bears Φ and the reverse Γ. On another piece (*op. cit.*, νν) the signature Γ appears on both sides.

equipoise to the figure, the tips on either side coming down towards the lower of the two steps on which she is seated. She holds a wand transversely in her right hand, and rests her left on the corner of the upper step. The exergual space beneath the broad base is filled by an olive-branch.²³

All the Terinaean types of this category present the same feature of the outspread evenly balanced wings. In each case Nikê Terina holds either a caduceus or an olive-branch in her right hand, and rests her left on the edge of the cippus, in one case also grasping a wreath. But, what is especially noteworthy, in place of the single somewhat high base on which Nikê Terina is seated on some earlier types, there is now for the first time introduced into the design a somewhat broader step or stone platform below the cippus [Pl. III. 13],²⁴ which seems to have been directly suggested by the lower step on the coin of Elis.

There is, of course, no slavish copying. Owing to the higher base on which Nikê Terina is seated, the posture of the legs is different—more of the right one appearing, and the left leg being drawn more back. But the general parallelism of the Eleian and Terinaean schemes is remarkable. There is, moreover, one interesting point of artistic criticism, which seems to have a conclusive bearing on the relation of the two designs to one another. The design as created by the engraver of the Eleian die forms a beautifully proportioned harmonious whole. The broad stepped base on which Victory rests, and the semi-recumbent pose of her lower limbs entailed

²³ Cf. *B. M. Cat.: Peloponnesus*, Pl. xii. 9; and for a better example of the obverse type, Pl. x. 7.

²⁴ Cf. Regling, Taf. ii. 77.

by it, forms the natural complement to the descending sweep of the wings on either side. Their tips almost meet the ends of the lower step, and give a unity to the whole composition. But, in the scheme as adopted by the engravers of the Terinaean dies, the double spread of the wings has no relation to the base, and the want of equipoise between the two, due to the slight forward stoop of the figure, gives it a certain appearance of top-heaviness. The whole conception is artistically unconvincing.

In glancing thus at some of the chief examples of the earlier period of the signed coinage at Terina, I have not hesitated to accept the opinion of such fine judges as Poole, Gardner, Furtwängler, and more recently of Dr. Jorgensen and Dr. Regling, that the small letters Φ and Γ , that appear on this series, belong in fact to the artistic engravers of the dies.

As this opinion, however, has been lately challenged on quite insufficient grounds, a brief consideration of the question may not be out of place.

The link of connexion supplied by the occurrence of the initial Φ at Thurioi and Terina was first pointed out by Mr. R. S. Poole.²⁵ In both cases the letter is stowed away in an inconspicuous position—at Thurioi, in the angle beneath the fore-part of the crest of the helmet [PL. III. 2]; at Terina, behind the neck of the Nymph [PL. III. 4]. And, what is still more significant, this similarity of procedure is associated on the dies of both cities with heads respectively of Athena and Nikê Terina, which singularly resemble one another in

²⁵ "Athenian Coin Engravers in Italy" (*Num. Chron.*, 1883, pp. 269 *seqq.*).

style and expression. On one of the Thurian didrachms, moreover, of this series [Pl. III. 1], the Φ is repeated in a still more microscopic guise on the haunch of the butting bull of the reverse,²⁶—a device wholly in keeping with the methods in vogue among the artist engravers of Magna Graecia and Sicily.²⁷ The fluttering bird on the exergual line beneath the bull on this and other parallel types with Φ on the obverse, is itself another link of connexion with Terina. Beneath the bull it has no meaning, though, as seen upon the hand of the seated nymph on a series of Terinaean coins, it is an integral part of the design. The comparison, however, is carried a step further by a coin of Terina to which Dr. Regling has recently called attention.²⁸ On this didrachm, the obverse of which again presents the signature Φ , a similar bird with expanded wings appears beneath the seat on the reverse, perched upon the exergual line in a manner perfectly analogous with that of the Thurian piece [Pl. III. 1].

Does the fluttering bird itself contain a reference to the name of the engraver?

On the reverse of one of the Thurian didrachms on which the bull is seen in a stage of development closely parallel with that of the last-mentioned piece, the place of the bird beneath the animal's legs is taken by the letters Φ ρ γ [Pl. III. 2]. From their comparatively large size it may be gathered that the engraver signs here rather in his quality as a mint

²⁶ Cf. Regling, *op. cit.*, p. 43 (Pl. iii. Fig. 2).

²⁷ So we find Kimôn signing on a dolphin's side, Evaenetos on its belly, and Eukleidēs—on an unpublished piece in my possession—placing the first three letters of his name on its back. In the same way, we see E and H on dolphins at Tarentum.

²⁸ *Op. cit.*, p. 43 (No. 1; S-58).

official than as an artist—an alternative practice for which, as we shall see, there are many parallels—but the inscription may be reasonably regarded as a somewhat fuller form of the Φ on the obverse. Professor P. Gardner had already suggested that the name was in fact $\Phi\rho\upsilon\gamma\iota\lambda\lambda\omicron\varsigma$,²⁹ and that he was possibly the same engraver whose signed work is found on more or less contemporary coins of Syracuse. Whether this latter identification be correct, and whether in turn the die-sinker should be identified with the gem-engraver of the same name, are points on which the existing materials, owing to their disparate character, hardly allow us to pass a decided opinion.

That the full name of Φ and $\Phi\rho\upsilon$ may have been Phrygillos, is itself not improbable, and in this connexion Dr. Regling has revived, with better evidence now in hand to support it, a suggestion thrown out by M. Sambon, that the fluttering bird beneath the bull on the coin of Thurioi is, in fact, a kind of finch, the Greek $\phi\rho\upsilon\gamma\iota\lambda\omicron\varsigma$ (Latin *fringilla*), and as such the “canting badge” of the engraver Phrygillos.³⁰

What is certain is that the earliest work of Φ with which we have to deal connects itself with the Athenian foundation of Thurioi. I have elsewhere shown³¹ that the Thurian didrachms with this signature, though they are somewhat later than the very earliest didrachm

²⁹ *Types of Greek Coins*, p. 121.

³⁰ Regling, *op. cit.*, p. 44; A. Sambon, *Cat. Maddalena*, No. 409 (p. 48).

³¹ “The Evolution of the Scheme of the Butting Bull on Sicilian and Magna Graecian Coin-Types” (“Contributions to Sicilian Numismatics,” II., *Num. Chron.*, 1896, pp. 135 *seqq.*, and see especially pp. 139, 140).

types of that city, struck in or shortly after 443 B.C.,³² exhibit the bull on the reverse under a comparatively early aspect.³³ This stage in the evolution of the type was, in fact, already overpassed by the date, not later than about 420 B.C., when the engraver ΜΟΛΟΣΣΟΣ begins his activity. In other words, the activity of Φ at Thurioi may be roughly set down as from 430, or shortly before,³⁴ to 420 B.C. His earliest work on the dies of Terina must more nearly approach the latter date.

A comparison supplied by one of the latest didrachms of Cumae,³⁵ struck, therefore, about 423 B.C., goes far to support this view. It will be seen that the pursed lips and general profile of the head on this piece [Pl. III. 3], present a distinct resemblance to the head within the olive-wreath on the earliest dies executed by Φ at Terina. At the same time, the Cumaean type is shown, by its lower relief and the stiffer treatment of the hair, to be a few years earlier in date.

The activity of Γ at Terina begins somewhat later than that of Φ. In his case the evidence is confined to this mint. His initial appears on a series of obverse types in the same place as Φ, immediately behind the nape of the neck,

³² Cf. Dr. Christian Jørgensen's article in *Corolla Numismatica*, "On the Earliest Coins of Thurion," pp. 166 *seqq.*, and Plates viii., ix.

³³ Jørgensen (*op. cit.*, pp. 171 *seqq.*) places the first Thurian coins with Φ at the beginning of his third Section.

³⁴ The early diobol of Herakleia with the head of Heraklēs, signed Φ (which, with Poole, I would refer to the artist of Thourioi and Terina), belongs, as Jørgensen (*op. cit.*, p. 175), to its earliest issue, c. 432 B.C., and is therefore a valuable indication for his chronology. The didrachm of Herakleia with Φ beneath Heraklēs on the reverse, is of approximately the same date.

³⁵ *Rev.* KYMAION. Cerberus on a mussel. See Millingen, *Sylloge of Unedited Coins of Greek Cities and Kings*, pp. 10, 11, and Pl. i. 4, from a coin in the Burgon Collection. The illustration of the obverse here given [Pl. III. 3] is from an electrotype in my possession, apparently of the Burgon coin.

and, though, as will be seen below, his practice varies, the signature is often extremely inconspicuous. On the reverse types, where it is found more often than in the case of Φ , it is placed not only in the field, but on the cippus upon which the Nymph is seated, and in one case, very minutely, on the rock upon which she rests her foot [Pl. III. 11].³⁶ It would be impossible to cite a clearer example of a signature *en artiste*.

It is evident that some of the heads in Γ 's "later manner" are not up to the artistic level of those on his earlier dies, which very closely reflect the style of his associate and probable master, Φ . It is quite possible that in this and in other cases where we have to deal with signatures on coins, the initial of a more well-known and artistic engraver may, under certain circumstances, have been attached to the work of subordinate die-sinkers in the same *atelier*, perhaps as a kind of official passport. The tendency to adopt such a procedure would be greatest in the later years of an engraver.

But where the signature was of this official class, it may very well have covered the actual handiwork of a subordinate.³⁷ It is noteworthy, moreover, in this connexion, that the obverse type of this series which presents

³⁶ Regling, *op. cit.*, No. 74 (II-κκκ). The example given in Pl. III. 11 is from the British Museum.

³⁷ The above remarks answer the objections recently raised by Messrs. H. von Fritze and H. Gaebler (*Nomisma*, i. (1907), pp. 16 *seqq.*) regarding the Φ and Γ as artists' signatures. The criticisms put forward in the above publication are in any case much exaggerated. There is no sufficient reason for supposing that Γ covers the work of "three or even six different engravers," though it is clear that some of the later obverse types with this signature show a falling off in style. The earlier work with which it is connected was no doubt executed under the strong influence of Φ , who appears to have been Γ 's master, and this accounts for the strong resemblance presented by certain dies.

the most obviously inferior work (Regling, A A) is coupled with a divergent form of the initial, Π taking the place of Γ . Would Γ himself have altered his otherwise unvarying signature? Something, no doubt, in the inferiority of certain later works signed Γ may have been due to the fact that he seems for some reason to have been deprived during this period of the association of Φ , who may reasonably be regarded as his master in the die-sinker's art.

The die-sinkers of the period immediately preceding that during which Φ and Γ were active in the mint of Terina seem already to have initialled some of their works, if we may so interpret the letters Δ and \odot that appear in the field of these pieces. The former initial is seen behind a head of somewhat immature type,³⁸ the latter in one case beneath the throne of the seated nymph in a design of great power and beauty.³⁹ From the initialling of dies to signing as author of a work of monetary art the transition is really imperceptible.

It seems certain, moreover, as I pointed out in my "Horsemen of Tarentum,"⁴⁰ that at a somewhat later date it was a usual practice in more than one of the Magna-Graecian mints for engravers to sign in the two capacities, both as a monetary official and *en artiste*, both types of signature being often illustrated in the same piece. Thus in the case of Philistiôn at

³⁸ Regling, *op. cit.*, No. 24 (type Q).

³⁹ *Op. cit.*, No. 18 (type ρ). The same initial \odot recurs in a similar position on No. 19 (type σ). Dr. Regling (p. 86) regards the \odot as "wohl einen Beamtennamen, schwerlich eine Künstlersignatur." He admits, however (*loc. cit.*), the possibility of Δ being an artist's signature from the position in which it appears by the nape of the neck. As pointed out below, the two categories shade off into one another.

⁴⁰ *Num. Chron.*, 1889, pp. 118 *seqq.*

Velia, although on the obverse of his coins he adopts the classical artistic device of inserting his name in full in minute letters beneath the crest of Pallas' helmet, there can be no reasonable doubt that the Φ seen in conspicuous letters on the reverse of the same coins belongs to the same engraver, and stands as an index of his official responsibility. So too Aristoxenos at Herakleia supplements this official initialling of the types by a signature hidden away in the design or on the exergual line, while at Metapontion what appears to be the same artistic engraver ingeniously combines both practices by signing with a large and visible A, beneath which the rest of the name is indicated in quite microscopic characters.

It is perhaps necessary to mention here, though only to reject in the most unqualified manner, the ingenious theory advanced by Mr. J. R. McClean,⁴¹ that Φ and Γ , where they appear, are numerals, and have reference to the gold standard "introduced into Italy by Dionysios:" Φ (= 500), for instance, representing so many units. But, as the group of coins before us was struck before the advent of Dionysios to power even on the Sicilian side of the Straits, it is impossible to suppose that this letter can have reference to his new gold standard. How in any case can a didrachm contain 500 units? In what system is the litra divided into 50? Finally, in the case of Γ (= 5) how explain the pieces presenting both Γ and Φ ? The whole theory, in every sense far-fetched, is quite beside the mark as regards the present series.

⁴¹ "The True Meaning of Φ on the Coinage of Magna Graecia," *Num. Chron.*, 1907, pp. 107 *seqq.* Mr. McClean's argument is quite unintelligible to me.

§ 2. THE PERIOD OF SYRACUSAN INFLUENCE: DIES BY
THE HAND OF EVAENETOS.

The new discovery recorded in the present Section may be thought to give something like the *coup de grâce* to the above-mentioned attempts to exclude Φ and Γ on the master-pieces of the coinage of Terina from the category of artists' signatures. The well-authenticated appearance of the signature of one of the greatest of monetary artists on a Terinaean die belonging to the immediately succeeding period, throws at the same time a retrospective light on the traditions of the Terina Mint.

It has been demonstrated in the preceding Section, that the earlier signed work on the coins of Terina bears strong evidence of the influence of Attic models. The works with which we have at present to deal bear even more conclusively the impress of Syracusan art, imposed by the ascendancy of the elder Dionysios.

Dr. Regling, in his excellent monograph, has shown that, about the beginning of the fourth century, coin-types of a "new style"⁴² make their appearance at Terina, followed by others in a style justly described by him as "rich."

The obverse type of the "new style" shows the head of Nikê Terina with somewhat elaborately curling locks behind, caught up in a star-spangled sphendonê [Pl. IV. 16]. The inscription in front of the head is ΤΕΡΙΝΑΙΩΝ. Formally the obverse of this die may be regarded as bearing a certain relation to some of the

⁴² *Terina*, p. 27, LL: "Neuer Stil: bald nach 400 v. C."

later types of Γ 's second and third manner,⁴³ showing a similar baggy sphendonê, though without the stars. But the whole style and expression are widely different. The elaborate treatment of the hair as well as the starred bag of the sphendonê suggest Syracusan comparisons—a suggestion which gains in force when we regard the face of Nikê Terina herself as here portrayed. The proud profile with which these luxuriant details are associated can hardly fail to call up the features of the Goddess of the Syracusan "medallions" in Kimôn's third manner.⁴⁴ This is well brought out in the enlarged phototype on Pl. V. 1. To me at least the head of this Terinaean type conveys the strong impression that, if not from the actual hand of Kimôn, it was executed in his *atelier*, and under his immediate inspiration.

The two reverse types with which this "Kimônian" obverse are associated,⁴⁵ stand less apart in style from the ordinary Terinaean series, though one of them presents a new aspect of the seated Nymph. In this case she is represented without wings, holding up a patera, while a small Victory flies behind, holding out an olive-wreath to crown her head [Pl. IV. 16].

To understand the genesis of the other and somewhat

⁴³ Regling, *op. cit.*, Taf. I., AA, BB, SS, HH.

⁴⁴ See my "Syracusan Medallions and their Engravers" (*Num. Chron.*, 1891, Pl. II. Fig. 8). No tetradrachms in Kimôn's "third manner" are known, with which to compare the Terinaean type. On his gold staters (*loc. cit.*, Figs. 3, 4a, 4b) the Goddess wears a starred sphendonê. Dr. Regling, *op. cit.*, p. 54, already noted with regard to this type, "Die Haartracht, namentlich die von der Ampyx an und an der sternbesetzten, gegen früher verbreiterten Sphendone entlang immer dichter werdende Lockenfülle erinnert ein wenig an die syracusanischen Dekadrachmen des Kimon." He was not then inclined to believe, however, in a direct or conscious connexion.

⁴⁵ Regling, *op. cit.*, Taf. III., $\mu\mu\mu$, $\nu\nu\nu$.

later class of coins in the "rich" style, it is necessary to have in view some of the latest types of the preceding period with which it is formally connected.

The later didrachms associated with Γ betray a certain deficiency in inventive power, and a tendency to stereotype the design of the Nikê Terina seated on a square cippus. Finally, the version of this scheme in which the seated figure is seen with a bird perched on the back of her hand becomes permanently fixed on the local dies.

On Pl. IV. 17 is given an example, this type belonging apparently to the period that immediately followed the close of Γ's activity, since it has no trace of a signature on either side. This piece, formerly in the Garrucci Collection,⁴⁶ is referred to by Dr. Regling,⁴⁷ but is not illustrated by him. The obverse, which is of fine style, is of interest as presenting for the first time the head with the hair rolled, and showing no signs of sphendonê, ampyx, or band of any kind. The eponymous Nymph is represented as wearing an ear-ring with a single drop—the ear-ring itself being an innovation—and the inscription ΤΕΠΙ is written upright behind the head. On the reverse, which is by no means equal to the obverse in execution, the cippus is hung with a wreath, apparently of olive, also a new feature.

⁴⁶ Garrucci, *Le Monete dell' Italia Antica*, II., Tav. cxvii. 14. The coin is now in my own collection. The reverse of the coin shows graffito markings, read by Garrucci, ΛΑΧΝΑ. This is no doubt the piece referred to by von Sallet (*Z. f. Numismatik*, i. p. 88) as presenting the graffito inscription ΚΑΑΑ beside the Nikê (cf. Regling, *op. cit.*, p. 30). After an attentive study, I am unable to accept either of these readings. The graffito lines are badly executed, but, read outwards, present somewhat the appearance of the Roman numerals XXXVI. Wt. 7.72 grammes.

⁴⁷ *Op. cit.*, p. 30.

This piece must still be considered as fitting on to the earlier series belonging to the last quarter of the fifth century, with which Φ and Γ are associated. Its special importance, however, lies in the fact that it forms a link of connexion with some remarkable works in the "rich" style to be described below. It will be seen that these latter types [Pl. IV. 17-22] simply reproduce, so far as their main outlines go, both the obverse and reverse designs of the above-mentioned didrachm. Of the class in question more than one variety exists. It may be divided, moreover, into an earlier and a later group. Of the first group Dr. Regling, in his recent monograph on the Coins of Terina, cites two obverse dies and five reverses, only differing from one another by almost imperceptible nuances.⁴⁸

Of these coins I am now able to publish two from my own collection, the exceptional preservation of the first of which has enabled me to discover on a detail of the reverse the actual signature of the engraver.

The first of these specimens is from a remarkable hoard found at Carosino, near Taranto, where it occurred in company with a variety of staters belonging to the finest period of the signed coinage of Tarentum.⁴⁹ The obverse type is not well centred, but the condition of the piece is extraordinarily brilliant, and absolutely *fleur de coin*.

⁴⁸ *Op. cit.*, pp. 28, 29. No. 78, *obv.* (MM); *rev.* (ooo). No. 79, *obv.* (MM); *rev.* (πππ). No. 80, *obv.* (MM); *rev.* (ppp). No. 81, *obv.* (MM); *rev.* (σσσ). No. 82, *obv.* (NN); *rev.* (τττ).

⁴⁹ See note, p. 51, below. I am indebted to Monsieur M. P. Vlasto for the indication of the original source of the coin. It was subsequently included in the Hirsch Sale of 1905 (No. 259).

The following is the full description of this interesting didrachm :—

Obv.—[TEPINAI]ΩΝ Head of Nikê Terina to r., wearing ear-ring with triple pendants and beaded necklace. The hair is rolled and elaborately waved. The whole in fine circle.

This obverse type answers to Regling, MM.

Rev.—Winged figure of the Nymph seated on square altar or cippus, resting on a narrow base. She wears a sleeveless chitôn and himation. On the ampyx above her forehead is the inscription EYA in microscopic characters. A bird with spread wings is perched on the back of her r. hand, and her l. rests on the back of the cippus. The whole in a fine circle. The design is of extraordinary relief.

Wt. 7.44 grammes. [Pl. IV. 19.]

This reverse type answers to Regling, σσσ.⁵⁰

The second specimen in my possession is nearly as brilliantly preserved as the other, and with the obverse design better centred.

Obv.—TEPINAIΩΝ. From the same die as the preceding.

Rev.—The type is almost identical, but from a different die. The folds of the falling drapery are more fully rendered and less stiff. On the ampyx of the seated figure the A of the signature EYA is faintly discernible. The design is in the same exceptionally high relief.

Wt. 7.64 grammes. [Pl. IV. 20.]

? Regling, σσσ, London, Bank Coll.

The general resemblance of the obverse head, with its luxuriant locks, to that of the Goddess on the Syracusan

⁵⁰ Dr. Regling (*Op. cit.*, p. 29) cites examples of this type in the following collections: Berlin, Cambridge, Jameson (once Montagu), B. M. (Bank Coll.), Milan, Munich, Naples, Ward, and Warren.

dekadrachms by Evaenetos had already struck many observers.⁵¹ But a wholly new complexion is put on the matter by the discovery that the reverse type of the above example bears the signature EYA, which can only be referred to Evaenetos himself.

The letters are extraordinarily minute, and it was only owing to the happy accident that I had in my possession the absolutely fresh specimen described above, that I was able to detect them.⁵² Even so, they are better seen under an actual microscope than with an ordinary lens. The accompanying illustration is my own greatly enlarged copy.



Annexed is also a print from a photographic enlargement.

The final A is here very clear, the Y is also discernible; but, curiously enough, the E, which is visible even to the naked eye on the coin itself, is a good deal blurred in this reproduction, owing to its being in shadow.



In face of this signature on the reverse it becomes almost certain that the obverse head—so suggestive of the mannerisms of this engraver—was not merely a copy, but was executed by the actual

⁵¹ *El.g.* Regling, *Terina*, pp. 54, 55; H. v. Fritze u. H. Gaebler, *Nomisma*, i. p. 19.

⁵² My reading has been confirmed by Professor J. L. Myres, Mr. G. F. Hill, and Dr. L. R. Farnell. On a fine specimen in the possession of M. Robert Jameson (once Montagu) the E and the upper part of the Y are clearly visible. An example in the Cabinet des Médailles (Old Collection) shows the lower part of the E.

hand of Evaenetos. The enlarged copies on Pl. V. 2, 3, which bring the head to the same scale as those of the "Medallions," shows how close the resemblance really is. The objection⁵³ raised to this view, that the arrangement of the hair is less effective, owing to the more definite line of division between the roll of hair in front and that of the crown, loses its cogency when we realise the limitations under which the engraver set to work. For whatever reason, the design on either side is a mere adaptation of the local Terinaean type above described.⁵⁴ It is simply a rendering of the old subjects in a wholly new style.

Unquestionably the reverse design suffers from the effect of the same limitations. It lacks the largeness and poetry of the monetary master-pieces of the preceding age, such as the Nymph poised in the hydria or drawing water at the fountain. It is based on a model executed at a time when the art of the local Terinaean engravers was already in a state of decadence. On the other hand, in technical execution and minute attention to detail, Evaenetos' figure of the seated Nymph is unsurpassed. The relief itself is extraordinarily high.

It is clear from the character of their two reverse types (which are in the style of Γ) that the "Kimônian" pieces are earlier at Terina than those which show the signature of Evaenetos. In my work on *Syracusan*

⁵³ See Regling, *op. cit.*, p. 54. "Es ist die Haartracht, die Euainetos bei seinen syracusanischen Dekadrachmen eingeführt hat und die hier als bei einer Kopie namentlich insofern minder grossartig wirkt, als der Graveur gar zu ängstlich den Wulst von den Haarwellen des Hinterkopfes getrennt hat, während bei Euainetos beides in einander übergeht."

⁵⁴ See p. 44, and Pl. IV. 17.

"Medallions" and their Engravers I gave reasons for supposing that the earliest of Evaenetos' dekadrachms belong to the beginning of the tyrannis of Dionysios, which was established in 406 B.C. Their first issue could hardly have been later than 400 B.C.⁵⁵ From the evolution perceptible in the style of these, the abundance of their issue, and the variety of dies used, it is evident that their emission extended over a considerable period. On the other hand, we have to remember that the earliest didrachms with the signature of Evaenetos go back at least to 415 B.C.,⁵⁶ and he must therefore have been, at a reasonable computation, well over his thirtieth year by the time he began to engrave his dekadrachm dies. It becomes difficult, therefore, to bring down his activity as an engraver of the "medallions" lower than at most 375 B.C.,⁵⁷ though their issue from old dies may have still continued for a while after that date.

The strong influence, if not something more, of Evaenetos on non-Sicilian dies in the latest period of his activity can be traced on the very beautiful type of a drachm of Massalia issued about this period [Pl. IV. 23].⁵⁸ The head of Artemis that here appears wears an

⁵⁵ Three silver dekadrachms of Evaenetos, all in brilliant condition, occurred in the West Sicilian (Contessa) hoard, deposited about 400 B.C. See my *Syracusan "Medallions,"* pp. 165 and 168, 169.

⁵⁶ *Op. cit.*, pp. 57 seqq. They are possibly a few years earlier than 415 B.C.

⁵⁷ This is bringing the date slightly lower than *Syracusan "Medallions,"* p. 106, where 385 B.C. is suggested as the lowest limit. But their first issue may have been a few years later than 406, and, considering the variety of the dies, twenty-five years is not perhaps too long a period to assign to the activity of their engraver.

⁵⁸ De La Saussaye, *Numismatique de la Gaule Narbonnaise*, Pl. ii. 34, and see p. 64. The specimen shown here [Pl. IV. 23] is from my own

olive-wreath — her distinctive local attribute⁵⁹ — and thus comes into a nearer comparison with the corn-crowned head of the Sicilian Goddess on the dekadrachms [Pl. V. 4]. That the Massaliote type was modelled on the latter design I had already pointed out in my *Syracusan "Medallions,"*⁶⁰ but the parallel now supplied by the smaller design of Evaenetos on the coins of Terina suggests the conclusion that this work too may have been actually executed in his *atelier*. The style and arrangement of the hair, the character of the profile, and a certain delicate touch which is seen in the treatment of the eye and lower eyelid, to my mind at least, reveal the master's hand. So far as the design is concerned it is, indeed, a more successful performance than the head on the didrachms of Terina, where the artistic power of the engraver was trammelled, as it would appear, by an inferior model. At Massalia, on the other hand, the olive-crowned head of Artemis is an entirely new conception, based on no local numismatic prototype, though the interweaving of the hair with the foliage in a triple spray is a free variation of the threefold arrangement of the green corn-blades on the head of the Spring Goddess of Syracuse. There we have the leaf without the ear; here, in the same way, the spray without the berries.

In the case of this Massaliote piece there is no signature, and we may after all have to do with a design executed rather under the immediate influence of Evaenetos than by his own hand. But there are

collection. The lion on the reverse recalls some Velian types, but is not equal to the head of Artemis as a work of art.

⁵⁹ Justin, l. xliii. c. 4.

⁶⁰ Page 112.

stronger reasons for recognizing his actual handiwork on a coin which has been justly regarded as one of the greatest masterpieces of the Tarentine Mint. Monsieur M. P. Vlasto has made to me the interesting suggestion that the E seen behind the veiled head of the Goddess on the noble gold stater reproduced in Pl. IV. 24, from a fine example recently found near Taranto, may also represent his signature. It will be seen at once that, so far as style is concerned, the head on this piece displays a considerable parallelism with that on the die executed by him for the Terinaean Mint, while, apart from the diaphanous veil, the whole character of the face and the luxuriant treatment of the hair bring the design into the closest relation with the heads of Evaenetos' dekadrachms. This is still better shown by the enlarged representation on Pl. V. 5, from the magnificent specimen in the British Museum. The reverse type of this Tarentine stater, in which the infant Taras is seen in a suppliant guise before his father Poseidôn, has been justly recognized as one of the finest of all Greek coin-types.⁶¹ The somewhat

⁶¹ In my "Horsemen of Tarentum," published twenty-five years ago, I was led to associate this gold stater with my Fourth Period. It seemed natural to see in the reverse type an allusion to the appeal of Taras to the Spartan mother-city, and the arrival of Archidâmos in 344 B.C. The connexion of the gold stater in question with the silver issue in my Fourth Period of the "Horsemen" holds good, but it is clear, from a note kindly supplied me by Monsieur Vlasto as to the composition of the hoard of coins referred to above that has since come to light at Carosino, that the dating of the whole group must be considerably thrown back. M. Vlasto, through whose hands this remarkable hoard passed, informs me that among the most recent types those represented were Nos. 1, 2, 3, 9, 10, 11, of Pl. iv., and No. 7 of Pl. xi. of the "Horsemen" belonging to my Fourth Period, as well as Nos. 7, 8, 9 of Pl. iii. included by me in the Third Period. What, moreover, is of special interest in the present connexion, the *fleur-de-coin* specimen of Terina described above on which the signature EYA has now been deciphered, belonged to the same find. This piece, which must from its condition have been one

conspicuous rendering of the E behind the head on the obverse of this coin cannot be regarded as a valid objection to the view that this may represent the master's signature, when we recall the very conspicuous characters in which his name appears on his later dekadrachms. But a still better warrant for regarding the initial letter here as that of Evaenetos is afforded by the gold fifty-litra pieces struck from his Syracusan dies, on which his signature is represented as in the present case by a single E, behind the young male head.⁶²

There can be no doubt that the employment of Syracusan engravers for the mint of Terina, more especially of the official die-sinker of Dionysios, stands in close relation with the domination that he at this time exercised in the toe of Italy. This begins with his expedition against Rhêgion in 391, bringing with it the defeat of the Krotoniate fleet, and culminates in the crushing defeat of the army of the Italiote confederates on the Helleporos in 389. This was followed by the capture of Skyllétion, Hipponion, and Kaulonia, the territories of which were added to those of Lokroi, the traditional ally of the Syracusans. The capture of Rhêgion followed in 387, and in 379 of Krotôn, the mother-city of Terina.

To defend the new Locrian state—Dionysios' Protectorate in Italy—he planned a line of fortification across the Isthmus of Squillace at its narrowest point, and the probable site of Terina, by the present Santa Eufemia, would lie just outside the western end of this

of the latest coins of the hoard, itself affords conclusive evidence that the Tarentine types of Period IV., including the gold stater signed E, were struck before, at the latest, 375 B.C. (see p. 53). The specimen, Pl. IV. 24, is in my own collection. Its weight is 8.53 grammes.

⁶² *B. M. Cat.: Sicily*, No. 172; A. J. El., *Syracusan "Medallions,"* Pl. v. Fig. 4.

projected "Vallum," which, however, seems never to have attained completion.⁶³ Terina, though apparently allowed to retain a nominal autonomy—for its name does not appear among the cities which the tyrant annexed or destroyed—must have been in a position of great dependence.

In view of these circumstances, we shall not be far out in placing the beginning of the period of Syracusan influence on the coinage of Terina at about 390 B.C. The type in which Kimôn's influence is so marked may date from about that year. 'The dies on which Evaenetos' name appears were executed somewhat later, and must be ascribed to the very close of the activity of that engraver, perhaps almost as late as 375 B.C. The mannerism of the head on the obverse itself suggests a very late phase in his style.

Closely allied to this first group of coins in the "rich" style, presenting the signature of Evaenetos, are two other types, Nos. 83 and 84 of Dr. Regling's list [Pl. IV. 21, 22]. So far as concerns the style and details both of the head on the obverse of these coins and of the seated figure on the reverse, it is impossible to draw any distinction between the two. But No. 84 [Pl. IV. 22] presents the monogram Ξ on its obverse, and a crab is inserted in the exergual space of the reverse.⁶⁴

The additional features exhibited by the last-mentioned example will receive particular consideration below. So far as the main types of these coins

⁶³ Strabo, vi. 1, 10. I may be allowed to refer to my note on the "Vallum of Dionysios" in Freeman's *History of Sicily*, iv. p. 203.

⁶⁴ Pl. IV. 22 is taken from an impression from the unique example of this piece in the Imperial Cabinet at Vienna, kindly supplied me by Dr. Kubitschek.

are concerned, they undoubtedly bear a strong resemblance to those showing the signature of Evaenetos. They have the appearance, however, of being of somewhat softer execution and slightly posterior to these.⁶⁵ It will be observed that the head on these pieces, though much in the same style, is distinguished by certain minute divergences in detail, especially in the outline of the nose, which is a shade less prominent. The face of Nikê Terina has, in fact, a certain individuality of its own, which may well reflect the handiwork of a pupil working in the master's traditions. It is still of great beauty, but the seated figure on the reverse does not seem equal, in design or execution, to that bearing the signature of Evaenetos. One slight falling off may be noted in the position of the wings. In the case of the preceding class, as generally with this scheme—the hind wing curves up over the crown of the Nymph's head. But on the present example the upper part of both wings is practically on the same level, the outlines of the two, which are not very clearly distinguishable, lying behind the head below the level of its crown.

If we may conclude that the above issues fit on to the close of those presenting Evaenetos' signature, we may perhaps bring down the date when the dies were executed to about 370 B.C. But considering their very close approximation to the others in style and design, it would not be safe to bring them down below this limit.

This conclusion seems at first sight to conflict with the ingenious explanation recently put forward of the crab in the exergual space of the second of these coins

⁶⁵ Dr. Regling has been independently led to the same conclusion. He observes of these two types (82 and 83 of his list): "beide sind im Stil ein wenig schwächer als 81."

[Pl. IV. 22]. Dr. Regling⁶⁶ sees in this the distinguishing badge of the Brettians, and brings the issue of this piece into connexion with their capture of Terina in 356 B.C.

The crab itself is the constantly recurring emblem on the Brettian coinage, and there can be no doubt that the appearance of this symbol on the later bronze coinage of Terina is to be taken as a badge of Brettian domination.⁶⁷ Diodoros, indeed, speaks of the Brettians having not only taken but sacked Terina in 356,⁶⁸ and, even allowing for the possibility that the coin itself might have been struck slightly before the actual overthrow, under pressure of an enforced alliance, a serious chronological discrepancy still remains. There is, moreover, another feature, in this case on the obverse side of the same didrachm, that also carries with it late associations.

This is the appearance, in addition to the full civic name ΤΕΡΙΝΑΙΩΝ in the field to the right, of a reduplication of the first letters of the name, to the left of the head, in the monogrammatic form Ε. The same abbreviation accompanied by a fuller version of the name on the other side of the coin, occurs on some apparently contemporary diobols. But there does not seem to be anything to be said in favour of the suggestion⁶⁹ that the monogram was taken over from these on to the die

⁶⁶ *Op. cit.*, p. 56.

⁶⁷ I have already pointed this out in my "Horsemen of Tarentum," p. 110, note 137 (cited by Dr. Regling, *loc. cit.*).

⁶⁸ xvi. 15, *Olympiad* 106, 1: Καὶ πρῶτον μὲν Τερίναν πόλιν ἐκπολιορκήσαντες διήρπασαν.

⁶⁹ Regling, *op. cit.*, p. 56, who also makes the alternative suggestion that it is an abbreviation of a personal name, perhaps the leader of the Brettians.

of the larger denomination by a Brettian engraver imperfectly acquainted with Greek. So far from being barbarous, indeed, the die itself is of highly artistic execution.

Another more probable explanation, however, lies ready to hand. The abbreviated form of the civic signature is altogether in conformity with the usage found on the coinage of Corinthian model, and is no doubt originally due to the transliteration for the Colonial issues of the φ of the mother-city. Often it is a single letter, as at Leukas, on the early coins of Ambrakia, at Thyrræion, and Dyrrhachion; at times it is a monogram or the first two or three letters of the name, as at Anaktorion, or Astakos.

When in the course of the fourth century B.C. the Italian Lokroi, Rhêgion,⁷⁰ and the neighbouring town of Mesma struck "pegasi" in their own names, they conformed to the same practice of abbreviation.⁷¹ What, however, is of more direct pertinence in the present connexion, Terina herself issued a coinage of this Corinthian type [Pl. IV. 26], on which the civic name appears in the same monogrammatic form Ξ as on the didrachm under discussion.

The view has been put forward that these Terinaean "pegasi," which seem to be of great rarity,⁷² were

⁷⁰ The "pegasi" of Rhêgion are distinctly later in type than those of Terina. The Mesma example is also late and of barbarous fabric.

⁷¹ Several of the Lokrian coins, however, show the fuller form of the name.

⁷² One of the few specimens known of this rare type was acquired by Dr. Imhoof Blumer at Reggio di Calabria ("Die Münzen Akarnaniens," *Numismatische Zeitschrift*, 1878, p. 7, n. 7), illustrated by him, *Monnaies Grecques*, 1883, Pl. A, 12. Its weight is 8.58 grammes. Thanks to the kindness of Dr. Regling, I am able to reproduce this coin (now in the Berlin Museum) on Pl. IV. 26.

struck on the liberation of the city from the Brettian yoke by Alexander the Molossian in 325 B.C.⁷³ But this theory must be unhesitatingly rejected. To any one who has closely followed the evolution of the helmeted head of Pallas on the long Corinthian series, it is clear that the type, as seen on the "pegasus" of Terina, goes back at least to the middle of the fourth century B.C. The proportions of the casque, the angle at which it is set on Pallas' head, the character of her locks, the wings of the horse itself, are themselves clear indications of this. But we have besides two comparisons which supply convincing evidence as to the comparatively early date of this type.

Dr. Imhoof Blumer, in first publishing this Corinthian stater of Terina,⁷⁴ pointed out that in its fabric it reproduces a peculiarity of the Syracusan "pegasi"—also shared by those of Lokroi—namely, that the side with the head of Pallas is somewhat convex, while that presenting the pegasus is slightly concave, just the opposite of the Corinthian tradition. But these Syracusan features gain a special significance from the fact that this stater of Terina exactly corresponds in style and design with the earliest class of pegasi struck at Syracuse itself, and presenting the civic legend in the archaizing form ΣΥΡΑΚΟΣΙΟΝ, with O in place of Ω. As I have elsewhere pointed out,⁷⁵ the date of this class is approximately fixed by the occurrence of a parallel type with the legend ΑΕΟΝΤΙΝΟΝ, which must have been due to the restoration

⁷³ *B. M. Cat.: Corinth, &c.*, p. xlix.; and Head, *Historia Numorum*, 2nd ed., p. 114.

⁷⁴ "Die Münzen Akarnaniens," *loc. cit.*

⁷⁵ *Syracusan Medallions*, pp. 156 *seqq.*, and cf. my note to Freeman's *Sicily*, vol. iv. pp. 283, 284.

of Leontine independence by Dion in 356 B.C. The companion issue of Syracuse itself doubtless dates from the time of his expedition in 357 B.C., and the introduction of these *πῶλοι* with the civic name of Syracuse is only one more example of Dion's Corinthianizing policy.

We have therefore strong reasons for believing that the Corinthian stater of Terina, which agrees so closely both in style and design with these alliance pieces of Syracuse and Leontinoi, was also struck about the time of Dion's expedition.

It would appear, however, that when very shortly after this date the Brettians had asserted their dominion at Terina, for some reason or other, probably as a medium of tribute, the citizens were temporarily allowed to revive their traditional type of didrachm issue, with the addition, however, on the reverse, of the Brettian crab as the badge of their dependent position. As this coinage seems to have followed almost immediately on the short-lived issue of "pegasi," it was no doubt owing to the influence of these that the monogrammatic E was taken over on the obverse.

But if, in agreement with Dr. Regling, we place the issue of this type in or about 356 B.C. we are again brought face to face with an obvious difficulty. Apart from the monogram and symbol, the types that it presents so closely resemble those of the coin [Pl. IV. 21], which can hardly have been struck, at the lowest estimate, later than 370 B.C., that the considerable discrepancy in date seems hardly explicable.

Yet the explanation is, after all, quite simple. The "Brettian" type in question does not, in fact, represent a new die, but simply the alteration of an old one.

As this may be thought a bold pronouncement, a brief *apologia* may not be amiss.

The slight inequalities in the impression due to the mechanical imperfections in the striking of ancient coins, make it often a difficult and delicate task to ascertain whether two or more specimens are actually from the same die. It requires, at any rate, long numismatic experience to be able to set aside such apparent divergences as are accidental in their nature and due to defective striking, to the different state of the die, the running of the metal, or to the effects of wear and tear on the coin itself. Undoubtedly, moreover, the old engravers had processes—about which we are imperfectly informed—by which it was possible to reproduce on more than one die a similar design with marvellous fidelity of detail.

Making all allowance, however, for difficulties such as these, a very close comparison of this "Brettian" piece [Pl. IV. 22] with the earlier issue [Pl. IV. 21] has convinced me that the original die in both cases was the same both for the obverse and reverse designs, but that in the case of the later coin two additions have been made to the die, namely, the Ξ , so inelegantly inserted behind the head, and the crab in the exergual space of the reverse. No one comparing the two heads can fail to remark the striking identity in style and expression, notably in the individual profile of the nose. The bad quality of the impression on the reverse side of the "Brettian" type, probably in part due to the used state of the die, makes the comparison more difficult, but the coincidence of certain minute details, such as the formation of the wings above referred to, leads to the same conclusion. The chronological discrepancy, therefore, loses its

force. We have simply to do with an old die adapted to suit new political requirements at a time when certainly neither Evaenetos himself nor any pupil of his was likely to have been available for the mint of Terina.

The chronological conclusions as to the issue of these later didrachms of Terina may be thus summarized as follows:—

The "New" or "Kimônian" type [Pl. IV. 16]	c. 390 B.C.
Coins of "rich style," signed by Evaenetos [Pl. IV. 19, 20]	c. 375 B.C.
Later issue of "rich" style [Pl. IV. 21] (perhaps engraved by a pupil of Evaenetos)	c. 370 B.C.
Corinthian staters of Terina [Pl. IV. 26]	357 B.C.
"Brettian" type [Pl. IV. 22] (die of later "rich" style altered)	c. 356 B.C.

With this last issue, impressed with the badge of alien dominion, the beautiful series of the didrachms of Terina finally concludes,⁷⁶ after running a course of about a century and a half. When, about 300 B.C., with the progress of Agathokles' arms on the Italian side of the straits,⁷⁷ Terina was for a while liberated from the Brettian yoke, only silver coins of small dimensions were issued. The tetrobols struck at this time bear the *triskelés* emblem, now recognized as personal to Agathokles,⁷⁸ behind the Nymph's head, and show the monogram Ξ on the reverse. The main designs on both sides are copied from the last didrachm types of

⁷⁶ See note at the end of this section.

⁷⁷ Regling, *op. cit.*, pp. 56, 57.

⁷⁸ G. F. Hill, *Coins of Ancient Sicily*, pp. 152 *seqq.*

the "rich" style, and may be taken to reflect the abiding popularity of the work of the great Syracusan engraver for the civic mint.

With these Agathokleian "thirds" the silver issue of the mint of Terina entirely ceases,⁷⁹ though the local

⁷⁹ Were it not for the prominent part taken by its authors, in recent numismatic publications, it would be hardly necessary seriously to confute the strange theory put forward by Messrs. H. von Fritze and H. Gaebler (*Nomisma*, p. 19, &c.), that several rather poor examples of fifth-century coin-types were copied by the die-strikers of Terina "after 300 B.C.," and the didrachm issue revived after having lapsed for over half a century.

The types in question, L (and L'), M, N, P, Q of Dr. Regling's list, and so far as their general position in the coinage goes rightly placed by him, are relegated in the above publication to the end of the whole series, and strung together at the bottom of their plate (*op. cit.*, Taf. II.).

It might have been thought that even a novice in numismatics would have recognized the fact that these pieces are simply characteristic examples of the uneven work to be found, even in the best period, at Terina as in other Magna Graecian cities. In most instances the coins in question are merely indifferent variations of well-known Terinaean types belonging to the period that immediately precedes the activity of Φ . In other cases (the obverses M and N and reverses Φ and χ), though more individual in their character, they are clearly to be grouped with the others.

To be able to distinguish the style of a period through superficial deficiencies of execution belongs itself to the elements of archaeological training. To imagine that the Greeks of the third century B.C. should have been capable or desirous of imitating the types and style of a series of coins belonging to a much earlier age, lies quite outside the bounds of probability. The archaizing fashion of a later, antiquarian, age is a very different matter. Nor was there anything in these examples to tempt such a revival. Why, indeed, if they had imitated earlier pieces should they have passed over what lay most ready to their hand, and have deliberately excluded from the field of imitation all the most recent, all the most abundant, all the most beautiful of the civic types, and sought their models amongst a group of comparatively undistinguished issues of over two centuries back? To build up on this fantastic basis a theory of the restoration of the didrachm coinage of Terina after the time of Agathoklès in the period of its last decline and that too of full weight at a time when other Italiote Cities were ceasing the issue of their larger denominations or reducing their

bronze coinage, partly in close association with Rhêgion, subsisted somewhat later.

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standard, may be truly described as the most "preposterous and perverse" proceeding in the history of recent numismatics.

IV.

NOTES ON A FIND OF ROMAN REPUBLICAN SILVER COINS AND OF ORNAMENTS FROM THE CENTENILLO MINE, SIERRA MORENA.

THE Province of Jaen, in the northern part of Andalusia, has once more proved true to its reputation as one of the most prolific of the divisions of southern Spain in archaeological discoveries, and especially in finds of hoards of coins; a fruitfulness to be accounted for by its geographical position, which made it the key to the passage from northern Spain, from Gaul, and from Italy to the fertile country of the Baetis, and to the important Mediterranean coast towns of Cadiz and Malaga, and by its exceptional richness in silver-lead mines, most of which lie in that part of the Sierra Morena where the discovery to which we refer was recently made.

Many of the finds of Roman coins from this province have never been published, the only traces of them left being a few isolated pieces in the hands of amateurs, who state that they know where they came from, or the tradition, generally founded on fact, of the discovery of a "tesoro de muchas monedas de plata" in this or the other district. Hoards of Roman gold coins are, so far as we are aware, unknown in the Province of Jaen. A few scattered examples have been found, but, generally

speaking, they are very rare. Of the finds of silver coins that have been published the better known are—

The Castulo (Cazlona) find (Mommsen, II. p. 124; Grueber, I. p. 190);

The two Oliva finds (Mommsen, II. p. 126; Grueber, I. p. 191);

The Santa Elena find (*Rev. Numism.*, IV. Ser., tome ix. 1905, pp. 396-405, 511);

And the find from the Centenillo mine, recently published in the *Journal of Roman Studies* (vol. i. pp. 100 ff.).

There are, moreover, three further discoveries of hoards of Roman coins known to the authors which have not yet been published. The most important in number, though perhaps not in interest, was made in 1907 in the northern part of the Province, and not far from Santa Elena. It consisted of about 972 silver and copper coins of which by far the greater part belonged to the third century of our era, although amongst them there were a few that went back to the second century (Antoninus Pius and Marcus Aurelius). The other finds all came to light in the neighbourhood of the Centenillo silver-lead mine, which lies in the Sierra Morena, about six miles in a direct line N.W. from the town of La Carolina. The first was made in 1896, and consisted, so far as it has been possible to ascertain, of about 181 republican coins contained in a small earthenware jar which had been buried in a spoil heap at the entrance to one of the Roman adits. This hoard has not been published, but from such evidence as it has been possible to gather together, it was probably hidden away soon after the year 50 B.C., which would make it contemporaneous with the hoard discovered at el

Centenillo in the spring of 1911 and mentioned above. The third discovery (which is the one with which this paper is concerned) was also made in 1911 (June) at a spot close to some springs of water about four kilometres to the N.W. of the mine. The coins and other objects, which came to light on digging the foundation

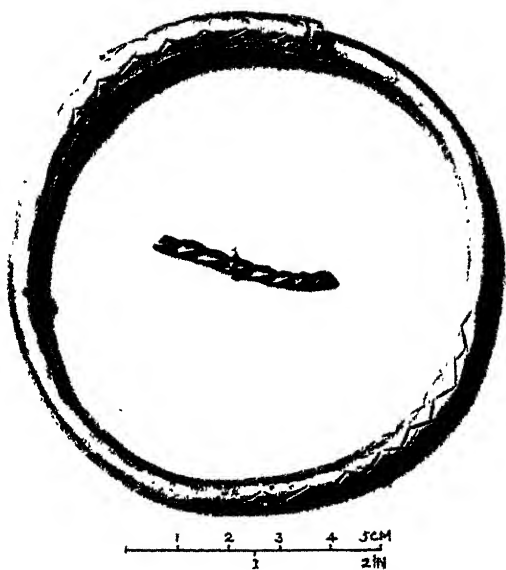


FIG. 1.—Silver Armlet ; and fragment of another ornament.

for a hut, were scattered in the soil, and if they had originally been gathered altogether in a receptacle all traces of it had disappeared. The hoard consisted of the coins mentioned below, of the armlet and the fragments of a torc which are shown in the accompanying photographs (Figs. 1, 2), of fragments of silver ear-rings and of other ornaments.

The armlet (which weighs 112 grammes) and the torc, which are in silver, formed probably part of the medium of exchange acknowledged in the country at the time when the "treasure" was buried. This will account for

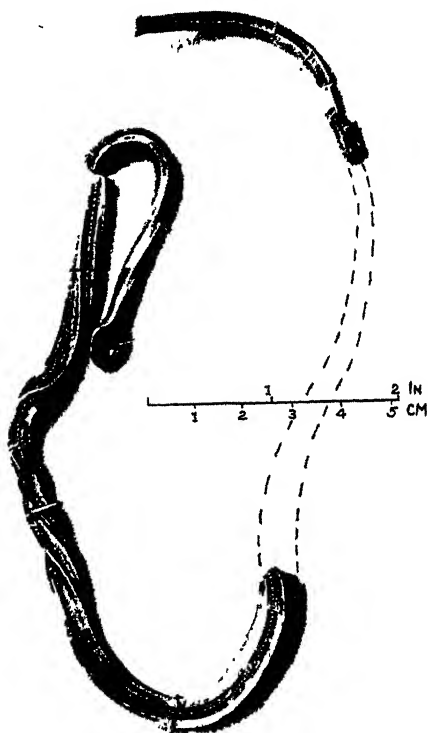


FIG. 2.—Silver Torc.

the fragmentary state of the torc which, when complete, must have been a fine and attractive piece of jewellery. The decoration, though simple in style, shows care and taste in its execution. Both the armlet

and the torc are, as Señor Vives points out, Iberian in motive and design, and do not show any Roman or Graeco-Roman influence. They probably go further back than the date of the burial of the hoard.

A list of the coins follows. We have given references to M. Babelon's *Monnaies de la République Romaine* ("B") as well as to Mr. Grueber's *Catalogue* ("G"), together with the dates assigned by each author to the various issues; the places of mintage are given according to Mr. Grueber.

No.	Description.	Reference.	Approx. date.	Where struck	No. of specimens.
1	Victoriate	G. I. 36. 295 B. I. 41. 99	229-217	Rome	2
2	Denarius, symbol knotted staff	G. I. 37. 300 B. I. 47. 20	"	"	1
3	Denarius: Victory in biga	G. I. 74. 574 B. I. 40. 6	196-173	"	1
4	C · IVNI · C · F ·	G. I. 89. 660 B. II. 101. 1	172-151 204	"	3
5	S · AFRA	G. I. 91. 670 B. I. 135. 1	172-151 200	"	2
6	L · SAVF	G. I. 111. 884 B. II. 421. 1	172-151 200	"	2
7	L · CVP	G. I. 113. 850 B. I. 444. 1	172-151 164	"	1
8	C · ANTESTI	G. I. 114. 859 B. I. 144. 1	172-151 174	"	1
9	C · MAIANI	G. II. 243. 434 B. II. 166. 1	172-151 194	Italy	1
10	C · VAL · C · F · FLAC	G. I. 120. 881 B. II. 510. 7	150-125 209	Rome	1
11	C · RENI	G. I. 121. 885 B. II. 399. 1	150-125 154	"	1
12	L · IVLI	G. I. 124. 899 B. II. 2. 1	150-125 136	"	1
13	SEX · PO · FOSTLVS	G. I. 131. 926 B. II. 336. 1	150-125 129	"	1
14	CN · LVCR · TRIO	G. I. 133. 931 B. II. 151. 1	150-125 164	"	1
15	M · BAEBI · Q · F · TAMPIL	G. I. 133. 935 B. I. 253. 2	150-125 144	"	4
16	AV · RVF	G. II. 246. 446 B. I. 242. 19	150-125 139	Italy	1
17	C · PLVTI	G. II. 248. 454 B. II. 329. 1	150-125 214	"	2

No.	Description.	Reference.	Approx. date.	Where struck.	No. of specimens
18	C · CATO	G. II. 249. 461 B. II. 368. 1	150-125 149	Italy	3
19	Q · MINV · RVF	G. II. 250. 464 B. II. 227. 1	150-125 149	"	2
20	M · FAN · C · F ·	G. II. 251. 468 B. I. 491. 1	150-125 149	"	4
21	M · CARBO	G. II. 252. 472 B. II. 288. 6	150-125 189	"	2
22	L · ANTES · GRAG	G. I. 142. 976 B. I. 146. 9	124-103 124	Rome	2
23	M · ABVRI · GEM	G. I. 146. 995 B. I. 96. 6	124-103 129	"	1
24	TI · MINVCI · C · F · AVGVRINI	G. I. 148. 1005 B. II. 231. 9	124-103 114	"	1
25	M · PORC · LAECA	G. I. 151. 1023 B. II. 369. 8	124-103 129	"	1
26	CN · DOM	G. I. 151. 1025 B. I. 462. 14	124-103 114	"	3
27	Elephant's head <i>symbol</i>	G. I. 155. 1044 B. I. 273. 38	124-103 99	"	1
28	M · CALID &c.	G. II. 255. 474 B. I. 283. 1	124-103 108	Italy	1
29	CN · FOVLV &c.	G. II. 255. 476 B. I. 513. 1	124-103 108	"	2
30	M · VARG	G. I. 163. 1068 B. II. 525. 1	102 129	Rome	2
31	Q · FABI · LABEO	G. II. 264. 494 B. I. 480. 1	102-100 144	Italy	1
32	M · TVLLI	G. II. 266. 502 B. II. 503. 1	102-100 139	"	2
33	T · CLOVLI	G. I. 165. 1079 B. I. 360. 1	101 119	Rome	2
34	M · ACILIVS · M · F	G. I. 169. 1118 B. I. 103. 4	100 129	"	2
35	L · POST · ALB ·	G. I. 171. 1129 B. II. 377. 1	99-95 134	"	1
36	Q · PILIPVS	G. I. 175. 1143 B. II. 186. 11	99-94 109	"	1
37	M · SERGI · SILVS	G. II. 269. 512 B. II. 442. 1	99-94 104	Italy	1
38	M · CIPI · M · F · (one incuse)	G. II. 271. 522 B. I. 341. 1	99-94 94	"	2
39	T · DEIDI	G. II. 276. 530 B. I. 456. 2	99-94 112	"	1
40	L · PHILIPPVS	G. II. 277. 532 B. II. 187. 12	99-94 112	"	1
41	M · FOVRI · L · F · PHILI	G. II. 283. 555 B. I. 525. 18	93-92 104	"	4
42	L · COSCO · M · F ·	G. I. 186. 1189 B. I. 436. 1	92 92	Rome	1

No.	Description.	Reference.	Approx. date	Where struck.	No. of speci- mens.
43	C · PVLCHER	G. I. 198. 1288 B. I. 845. 1	91 106	Rome	2
44	AP · CL · T · MAL · &c.	G. I. 199. 1290 B. I. 847. 2	91 99	"	1
45	M' · AEMILIO LEP	G. II. 291. 590 B. I. 118. 7	91 112	Italy	1
46	CALD	G. I. 215. 1477 B. I. 869. 3	90 94	Rome	1
					75

NOTES ON CONDITION OF THE LAST SIX ISSUES.

41. Slightly worn. 42. Ditto. 43. One a good deal worn, the other sharp. 44. Good. 45. Good. 46. Slightly worn.

It will be observed, on comparison with Mr. Grueber's Table of Finds (Vol. III. of his *Catalogue*), that this hoard belongs to the same group as the other Spanish hoards of Pozoblanco, Cazlona, and Oliva. In that table the latest coins in the Pozoblanco hoard are assigned to 92 B.C., in the other two to 90 B.C. Unfortunately our hoard is so small in number that it is of no assistance in ascertaining the dates of coins contained in it.

We do not know what troubles occasioned the burial of these hoards towards the end of the nineties. The campaigns of T. Didius against the Celtiberians, which began in 98, were over in 93, when he triumphed *de Celtibereis*, as did P. Licinius Crassus *de Lusitaneis*. It is possible that these triumphs did not represent an effective settlement, but that subsequent troubles have not been recorded, having been thrown into the shade by the great crisis of the Social War.

G. F. HILL.

HORACE W. SANDARS.

V.

PALMER'S GREEN HOARD.

ON the 1st of May last year in the course of digging out the foundations for a house in Palmer's Green, N., a workman came across a number of silver coins (pennies) which appear to have been buried together, but which had not been placed in any kind of vessel. It is, however, quite probable that the coins had been wrapped in some cloth or linen which had entirely perished. Had this not been so, the coins would in course of time have got separated and to some extent scattered. As it was they were all pretty close together.

The hoard was claimed by the Crown as treasure-trove, and, as customary, an inquest was held and the claim of the Treasury was allowed. The coins were as usual sent by the Treasury to the Museum, where I made a careful examination of them. The result of this examination was as follows: The hoard consisted in all of 217 coins (one only a portion). Of these 208 were pennies of Henry III of the long-cross type, struck at various mints in England and of various issues. Five pennies were Irish of the same reign and were struck in Dublin, and 4 others were of Alexander III of Scotland.

I give a list of the coins with descriptions—

HENRY III.

LONG-CROSS COINAGE.

PENNIES.

Obverse.	Reverse.
Head of King, facing, wearing crown; around, legend between two circles of dots.	Long double-cross pommée; three pellets in each angle; around, legend between two circles of dots.

Class I. with legend TĒRĀI' on reverse.

No mint-name (London).

¹ *hĀNRICVS : RĀX ² JNG LIĒ TĒR ĀI'
(Pellet each side of head.)

Class II. with legend TĒRĀI' on obverse.

Same type as preceding. Same type as preceding.

Gloucester.

*hĀNRICVS RĀX TĒRĀI' ROG ERO NG LOV (2)

London.

Same. NIĀ OLĀ ONL VND (2)

York.

Same. IOH ONĀ VĀR WIĀ

¹ The star and crescent were the badge of Richard I and formed the reverse type of the Irish coins of John and Henry III.

² On this class the name of the mint sometimes occurs; in such cases the legend ANG is transferred to the obverse, and LIĒ omitted.

Class III. with numeral III. on obverse.

Obverse.

Reverse.

Same type as Class I.

Same type as Class I.

Canterbury.

*hǣNRICVS REX III'

REX :

(Pellet each side of head.)

RǢX .

(Pellet each side of head.)

RǢX .

RǢX :

GIL BER TON ƿƿN

NIƿ OLƿ ONƿ ƿNT (2)

" "

NIƿ OLƿ ON ƿƿN (2)

Carlisle.

*hǣNRICVS REX . III'

IOH ON ƿR LƿL

Exeter.

*hǣNRICVS REX III'

ION ONƿ ƿƿƿ TRƿ (2)

Phi LIP ON ƿƿƿ

WAL TER ONƿ ƿƿƿ

Lincoln.

*hǣNRICVS REX . III'

REX



ION ONL INƿ OLN

WIL LƿM ONL INƿ

London.

*hǣNRICVS REX III'

RǢX .

RǢX :

(Pellet each side of head.)

RǢX .

RǢX :

(Pellet each side of head.)

RǢX .

RǢX .

RǢX :

(Pellet each side of head.)

hƿN RIO NLV NDE (3)

" " (4)

" " (2)

hƿN RIO NLV NDƿ

NIƿ OLƿ ONL VND (2)

" " (3)

NIƿ OLƿ ONL VND

NIƿ OLƿ ONL VND (2)

Newcastle.

Obverse.	Reverse.
*hǣnricʋs rǣx : III'	hǣn rio nna wǣa
(Pellet each side of head.)	

Northampton.

*hǣnricʋs rǣx : III'	Phi LIP ONN ORh WIL LEM ONN ORh
----------------------	------------------------------------

Norwich.

*hǣnricʋs rǣx III'	IOH ONN OR WIS
--------------------	----------------

Oxford.

*hǣnricʋs rǣx . III'	OA MON OXO NFOR
----------------------	-----------------

Shrewsbury.

*hǣnricʋs rǣx III'	PER ISON SRO SEB
--------------------	------------------

Winchester.

*hǣnricʋs rǣx III'	IVR DJN ON W INa
--------------------	------------------

York.

*hǣnricʋs rǣx . III'	REN ERO NA . . .
----------------------	------------------

Class IV. With Sceptre and Numeral III.

Same type as Class I., but showing r. hand of King holding sceptre. Same type as Class I.

Canterbury.

hǣnricʋs rǣx . III'	GIL BER TON aJN (2)
(Pellets at sides of head.)	
rǣx	GIL BER TON aJN
(No pellets.)	
rǣx	GIL BǣR TON aJN
(No pellets.)	

Obverse.	Reverse.
hēNRICVS REX (With and without pellets.)	GIL BER ONA JNT (2)
REX .	GIL BER TON ENT
(No pellets.)	
REX	GIL LEB ERT ONA J
(No pellets.)	
REX .	IOh SON AN TĒR
(No pellets.)	
REX .	IOh SON AN TĒR
(No pellets.)	
REX .	ION ON AN TĒR
(Pellets.)	
REX	ION ON AN TĒR (4)
(No pellets.)	
REX .	ION ON AN TĒR
(Pellets.)	
REX . or REX	NIā OLā ONA JNT (13)
(Pellets or no pellets.)	(One double-struck.)
REX .	ROB ERT ONA JNT (4)
(Pellets.)	
REX .	ROB ERT ONA JNT (4)
(Pellets.)	
REX	ROB ERT ONA JNT
(Pellets.)	
REX . or REX	WAL TĒR ONA JNT (5)
(Pellets or no pellets.)	
REX .	WAL TĒR ONA JNT
(Pellets.)	
REX . (or REX)	WIL LEM ONA JNT (17)
(Pellets or no pellets.)	
hēNRICVS REX . III ³	WIL LEM ONK JN
(Pellets.)	
REX	WIL LEM EON KJN
(No pellets.)	

Durham.

hēNRICVS REX . . .	RIā RD OND VRh
(No pellets.)	

³ This is a variation in the spelling of the King's name, which does not appear to have occurred on any other coin in the hoard.

London.

Obverse.	Reverse.
hÆNRICVS REX III (No pellets.) RÆX . (No pellets.) RÆX . (Pellets.) RÆX (No pellets.) RÆX (No pellets.) REX . or REX (Pellets or no pellets.) RÆX (No pellets.) RÆX (Pellets.) RÆX (No pellets.) RÆX (No pellets.) RÆX . or RÆX (Pellets or no pellets.) RÆX . (No pellets.) RÆX . or RÆX (Pellets or no pellets.) RÆX (Pellets or no pellets.) RÆX (No pellets.) RÆX (No pellets.) RÆX (Pellets.) RÆX (No pellets.) RÆX (No pellets.)	DÆV ION LVN DÆ DÆV ION LVN DEN DÆV ION LVN DÆN DÆ VID ONL VND ⁴ hÆN RIO NL VND hÆN RIO NLV NDÆ (18) hÆN RIO NLV NDÆ (7) (One broken.) IOh SON LVN DEN ⁵ NIÆ OLÆ ONL VND NIÆ OLÆ ONL VND (7) REN JVD ONL VND (14) REN JVD ONL VND RIÆ ÆRD ONL VND (15) RIÆ ÆRD ONL VND (7) " " " " (Retrograde.) WÆL TÆR ONL VND (3) WÆL TÆR ONL VND (3) WÆL TÆR ONL VND (2) WIL LÆM ONL VND

⁴ Probably the same moneyer as of Class III.

⁵ No doubt the same moneyer as of Classes II. and III. (see below, p. 88).

Obverse.	Reverse.
hæNRICVS REX . (Pellets or no pellets.)	WIL LEM ONL VND (2)
REX (No pellets.)	WIL LEM ONL VND (6)
(Double struck.)	LV NDæ NLV NDæ

St. Edmundsbury.

hæNRICVS REX III' (No pellets.)	ION ONS' æDM VND
REX (No pellets.)	ION ONS' æDM VND
REX (No pellets.)	ION ONS' æIN TæD
REX (No pellets.)	RJN DVL FON S'æD (3)
REX (Pellets.)	STæ PhJæ NæO SæD

Uncertain mint (1)

IRISH.

HENRY III.

Dublin.

Head of King, crowned, facing, . Long double-cross pommée ;
 sceptre on left ; mullet of three pellets in each angle ;
 five points (? cinquefoil) around, RIG æRD OND IVæ (5).
 on r. ; all within triangle,
 at sides of which, hæNR
 æVSR æXIII'

SCOTTISH.

ALEXANDER III.

LONG DOUBLE-CROSS ISSUE.

Series I.

Head of King to r., crowned ; Long double-cross pommée ;
 before, sceptre ; around, in each angle, star of six
 name of King. points ; around, name of
 moneyer and mint.

Berwick.

ALEXANDER REX

ROB æRT ON BæR

Series II.

Obverse.		Reverse.
Similar ; head of King, to l.	Same.	

Berwick.

ALEXANDER REX

WJL TÆR ON BÆR

Edinburgh.

ALEXANDER REX

WI · LÆ MO N · Æ ·

St. Andrews.

ALEXANDER REX

TOM AS ON AN

In the case of a somewhat limited hoard like the present one, it is not to be expected that much information can be extracted, and I am all the more disinclined to go into minute particulars because Mr. L. A. Lawrence for some time past has given special attention to the long-cross coinage of Henry III, and I have no doubt, when he has completed his researches, that he will be able to throw a good deal of light on the succession of the various issues. Limited as it is, we are, however, able to extract a certain amount of evidence from this hoard.

First of all, we will consider the institution of this so-called new coinage (*nova moneta*) of Henry III. Hawkins (*Silver Coinage*, ed. 1887, p. 195) says that "in 1248 a new coinage was issued having the cross on the reverse extending to the edge of the coin. Ruding (*Annals of the Coinage*, Vol. i. p. 184) is more cautious, and he says, "Although the grant to the Earl of Cornwall bears date on the 27th July, 1247, yet it appears that nothing was done until the following year, when the coins were found to be so corrupted and debased by the clippers and counterfeiters that neither the English themselves nor

even their foreign neighbours could any longer endure it." This statement is not, however, fully endorsed by the contemporary documents which have been brought to light since not only Ruding but also Hawkins wrote. We will therefore mention the following extracts.

In the Calendar of Patent Rolls, Henry III, published in 1906 and 1908, the following entries relating to this coinage occur :—

1247, June 13 (Reading). The King issued a grant to Richard, Earl of Cornwall, his brother, that new money shall be made in England, and that he shall cause it to be made in the King's name for five years, on condition that the King and his heirs have a moiety of the profit of the exchange (*cambitionis*) or mint (*monetae*), and the Earl, his assigns or executors, shall have the other moiety; saving to him and his assigns the money (*pecunia*), which he shall lay out in making the said mints.

Again, on July 27, 1247 (Woodstock). In consideration of a loan of 10,000 marks, a grant was issued to Richard, Earl of Cornwall, that the King will make new money in England, Ireland, and Wales from All Saints, 32 Henry III, for seven years, so that the King and his heirs have one moiety of that profit of the exchange and mint and the Earl and his assigns the other moiety. On the same day this same patent appears to have been extended to *twelve* years, and it would seem from this that the Earl did not think the term of seven years sufficiently long to see himself recouped for his loan of 10,000 marks; so he at once got his patent extended for a period of five years more.

The next entry relating to the Earl Richard in connexion with the coinage is March 2, 1248, when he received

a further grant from the King that all moneys, which he caused to be delivered through the King's land at the exchange, shall be paid to the Earl or his assigns at his pleasure with a moiety of the profit of the said exchange. Again, on April 27 of the same year, William Hardel, as Warden of the Exchange (*Cambii*), was appointed to superintend the getting in of the old money and the issue of the new; and on the following day it was further ordered that Hardel's appointment as Warden of the whole Mint shall be notified to all moneyers (*monetarii*) and changers throughout England.

These last two extracts from the Patent Rolls show very clearly that at least on March 2, 1248, the new coinage had already been issued, and it may therefore be safely concluded, apart from any other evidence, that, as the Earl of Cornwall had from June 18 to November 1 (All Saints' Day) to prepare his new dies, he was ready to begin the issue of his new money at the appointed time. Moreover, as he had lent the King 10,000 marks, he was no doubt anxious to see the return of his money as soon as possible. The extension of his grant from five years to seven and then immediately to twelve proves that he had cause for some anxiety. But beyond these facts we have other confirmatory information from two quite independent sources.

John de Oxenede, under date 1247, relates that in that year the English money began to be intolerable on account of the detestable practice of clipping. To remedy this evil the King ordered that a new die should be made on which the cross was to extend to the outer edge of the coin, which should remain of the same weight and fineness. So that if any portion of the cross should be clipped the coin would not be acceptable in currency.

At the same time John de Oxenede drew in the margin of his Chronicle a sketch of the reverse of the penny.

The second authority is the *Chronica Maiorum et Vice-Comitum Londoniarum* which, under date 1247, states, *Tunc omnino creata est nova moneta, scilicet, statim post festam Omnium Sanctorum*. This entry was made at the end of the 31st year of Henry III during the shrievalty of William Vyel and Nicholas Bat, who had entered on their respective offices on the 29th September preceding. The reign of Henry III began on October 28, 1216; so the 31st year of his reign would terminate on October 27 in 1247. It is quite possible that the people at first showed some disinclination to part with the money to which they had been accustomed for so long a period. In this way the new issue may at its commencement have been somewhat limited, and it therefore required orders from time to time to be issued to compel the people to hand in their old money for new. Also we shall see that up to March of the next year there was still a good deal of the old money in circulation.

Having, I venture to think, satisfactorily fixed the date of the institution of the new coinage, we may now turn to the coins themselves, and may try to ascertain what evidence the Palmer's Green hoard supplies for their chronological classification. The order of classification which I have adopted is that which has been proposed by Mr. L. A. Lawrence⁶ and which had been previously suggested by Mr. P. Carlyon-Britton.⁷ As the reverses throughout preserve a uniform type and only vary in the legends, which give the names of the moneyers and the

⁶ *Brit. Num. Journ.*, 1908, pp. 436, 437.

⁷ *Ibid.*, 1907, p. 26.

mints, we must look to the obverses for any guide or help. The main differences are in the legends, there being only one variation in the King's head or bust. According to this classification the order would be—

- I. Coins with head facing: legend, *h  NRICVS REX*;
or *h  NRICVS R  X ANG.*
- II. Similar type: legend, *h  NRICVS R  X T  R  '*
- III. Similar type: legend, *h  NRICVS R  X III'*
- IV. Similar type: head and r. hand holding sceptre;
legend (as in Class III.), *h  NRICVS R  X III'*

This is practically the inverse order of that adopted by Hawkins;⁸ but it must be borne in mind that when Hawkins wrote in 1841 he had not available the great mass of information since published, nor were the documents at the Public Record Office so accessible for reference as they are now. He placed first the coins which in their obverse type resembled more closely those of the short-cross class which had immediately preceded, viz. the head of the King with the sceptre, and he transferred to the end of the reign those which came nearest in the obverse type to the subsequent issues of Henry's successor, Edward I.

It will be seen that amongst the coins found at Palmer's Green there existed only one piece of Class I., and four with the legend *T  R  '* (Class II.). The various mints of Class III. were fairly fully represented, but several of them only by a single specimen, whilst those of London and Canterbury showed respectively 18 and 17 specimens. The bulk of the hoard was of Class IV., for out of a total of 208 pieces 162 belonged

⁸ *Silver Coinage of England*, 3rd ed., pp. 195, 196.

to it, of which 90 were of London and 63 of Canterbury. This circumstance alone lends considerable confirmation to the order of classification here adopted; for naturally it would be of the last issue that we should expect to find the largest number of specimens.

The presence of only one coin of Class I. in the hoard, and the absence of those which are to be attributed to the latest issues of Class IV., render it impossible to enter on any definite discussion, based on the present hoard, as to the entire period over which the long-cross money extended. We may, however, offer some tentative remarks about the mints and the general classification.

The only mints which were in operation at the end of the short-cross period were those of London, Canterbury, St. Edmundsbury, and Durham,⁹ and there does not appear to have been any increase on the institution of the new coinage. In fact, in the National Collection the only mints represented by this class are those of London and Canterbury. Coins of St. Edmundsbury are, I believe, known, but I have not met with them, and there are none of Durham. With the change of the obverse legend to *HENRICVS REX TERCIVS* there is a large addition to the number of mints, and with the legend *REX III* and no sceptre they reach their maximum; but with *REX III* and the sceptre they again return to practically their original number, viz. London, Canterbury, St. Edmundsbury, and Durham.

Now, is it possible to account in any way for this very considerable variation in the number of mints in operation? If so it can only be done conjecturally, and I

⁹ See the evidence of the Colchester Find, *Num. Chron.*, 1903, pp. 161, 162.

would suggest that when the new money was first issued no addition was thought necessary to those places then exercising the right of coinage. When, however, the output of coins was evidently not sufficiently great to bring a return of the loan to the Earl of Cornwall he increased their number. That would be at the time that the word TÆRQI' was inserted after the King's name. This policy was further marked in connexion with the issue of the next class, that having numerals after the King's name (RÆX III); but later, for reasons at present unascertained, the mints were again reduced to their original number, that is, as they stood at the end of the short-cross issue. As we have no outside evidence we can only argue this point from the coins themselves.

Though we possess no documents which directly refer to these changes in the legends, we have some important evidence in the *Appendix to the Chronicle of John de Oxenede* as to when Class II. came to an end and Class III. was instituted. An account is there given of the trial of the pix, which took place in the 32nd year of Henry, on Wednesday the next before the Feast of St. Gregory (*i.e.* March 12, 1248). The trial was made of the old money as well as of the new. There were present at this ceremony the Mayor of London, Michael Tovy, and the two sheriffs, Nicholas Bat and William Vyel, and many others, including 13 goldsmiths (*aurifabri*). The King was also present and the Earl of Cornwall, William de Haverhill, the King's treasurer, and William Hardel, who at that time was warden of the exchange of London and Canterbury. The extended office of the last, as we have seen, did not take place until a few weeks later. The new money was pronounced to

be good and legal (*bona et legalis*); but the old money, as ten pennies had to be allowed to the pound weight of silver, was condemned as neither good nor legal (*non erat bona nec legalis*). This was due to the clipping which the coins had undergone.

At the same time assays were made of two pieces of silver of the weight of 40 solidi, of which one was of pure silver, the other composed of metal which was to be used for the coinage, and these were deposited in the King's treasury at Westminster. Similar assays were made of like pieces of silver of the weight of 40 denarii to be sent to the various places where exchanges were located. These were Canterbury, St. Edmundsbury, Norwich, Oxford, Northampton, Lincoln, Winchester, Gloucester, Exeter, York, and Ilchester.¹⁰ These include all the mints, with the exception perhaps of Ilchester, which issued coins having after the King's name the word *TERRA*. So the trial of the *pix* was connected with this second issue of the new money. But a still more important transaction took place at the same time, and this was the appointment, not only of the mints, with the exception of London, Canterbury, St. Edmundsbury, and Durham, which were to issue future money, but also the supplying of the names of the moneyers, wardens, assayers, and clerks of each place, who were to undertake and be responsible for the work. The mints besides London and Canterbury were those of Winchester, Lincoln, Gloucester, Oxford, Northampton,¹¹

¹⁰ Irecester.

¹¹ Wrongly given as Norwich; but the moneyers' names, William de Gangy, Thomas Rinne, Philip son of Robert, and Lucas Parmentarius, show clearly that Norwich was a mis-entry for Northampton.

Shrewsbury, Wallingford, Ilchester,¹² Norwich, York, Carlisle, Wilton, Exeter, Hereford, Bristol, and Newcastle. Now the mint-names and those of the moneyers are those which are found on coins of Class III.; so that we have absolute evidence when coins of Class II. came to an end and those of Class III. were instituted.¹³ No doubt, though not mentioned, it was at the same time ordered that a change in the King's name from HENRICVS REX TERCI' to HENRICVS REX III should be made.

How long this issue lasted is a question which is not easily answered. We can only arrive at an approximate date by a process of induction. The number of coins which were present in the Palmer's Green hoard and which are otherwise extant would lead one to suppose that some time elapsed before the next change took place and the sceptre type (Class IV.) was introduced. So far I have been unable to obtain any evidence from the Pipe Rolls, but, judging from the material relating to the appointment of the moneyers which can be extracted from the Patent Rolls and Exchequer Accounts, I am disposed at the present moment to put the commencement of Class IV. not later than 1253, but more probably to the end of the previous year. This would give a period of about four years for the issue of Class III.

We will first take the evidence of the Patent Rolls and supplement it with what we can find in the Exchequer Accounts.

From 1249 to the early part of 1255 I have not met with any mention in the Patent Rolls of the appointment

¹² Iycester.

¹³ For convenience of those who have not an opportunity of consulting the publications of the Record Office, I append at the end of this paper the list of moneyers and officers of the mints.

of moneyers; but at the latter date and subsequently the following grants occur:—

1255, *April 29 (Westminster)*. Grant, for life, to Robert de Cantuaria, the elder, king's clerk, for his maintenance, of a die of the mint of Canterbury.¹⁴

1255, *May 8 (Reading)*. Grant, for life, to William de Gloucestre, king's goldsmith, of the die which Nicholas de Sancto Albano held in the mint of London.

1255, *November 14 (Windsor)*. Grant, for life, to Robert de Cambio, clerk, of one of the king's dies in the mint of Canterbury, with all issues and commodities belonging to such a die, he rendering at the Exchequer 100s. a year.

Mandate to John de Sumerkotes, warden of the king's change, to cause the die to be delivered to him.

1256, *January 10 (Westminster)*. Grant, for life, to Nicholas de Halou (or Haldlo) of one of the king's dies in the mint of Canterbury, he rendering at the Exchequer 100s. a year.¹⁵

Mandate to John de Sumercotes to deliver it to him.

1256, *April 12 (Westminster)*. Grant, for life, to John Terri of one of the dies in the mint of Canterbury with all the issues and commodities pertaining to such die, he rendering at the Exchequer 100s. a year.

Like letters for William Cokyn (Cockayne) of one die.

1256, *October 25 (Westminster)*. Grant to Henry de Frowick, Richard Bonaventure, David de Enefeld, Walter de Brussel, William de Gloucestre and John Hardel, citizens of London, of seven dies in the mint of London, saving the said William his die there previously granted to him for life, to hold to them for their lives with all issues &c.

1257, *January 27 (Windsor)*. Grant, for life, to Robert de

¹⁴ Robert de Cantuaria held a die at Canterbury previous to 1237. Patent Rolls, July 30, 1237.

¹⁵ Nicholas de Halou, Hanlo, Hadlo, &c., was a justice in cyre and was much employed by the King. Whether he had a grant of a die at Canterbury before 1256 I have not been able to ascertain. There are coins of earlier issues bearing the name of "Nicolo."

Cantuaria, king's clerk, son of Robert de Cantuaria, some time king's clerk, of a die in the mint of Canterbury, for his maintenance, he rendering yearly 100s. to the Exchequer.

1257, *October 1 (Woodstock)*. Grant, for life, to William de Gloucestre, king's goldsmith of London, of that die in the mint of Canterbury, which Robert de Cantuaria, son of Robert de Cantuaria sometime king's clerk and lately deceased, held for life; to hold with all the issues and profits rendering 100s. a year at the Exchequer.

As the names of all the moneyers mentioned in these grants occur on coins of Class IV. it is evident that their issue could not have begun later than the year 1255. From documentary information, and also from the evidence of the coins themselves, it would appear that the grant for life of a die was frequently preceded by tenure of office of some years' duration. In the Exchequer Rolls (*Trinity 34, Henry III, i.e. 1250*) it is stated that John Terri, evidently the same moneyer who is mentioned above as receiving a grant for life with William Cokyn of a die at the Canterbury Mint, April 12, 1256, was accused of issuing false money, and amongst those who offered themselves as his sureties were Nicholas de Sancto Albano, Henry de Frowick, Walter de Brussel, Richard Bonaventure, David de Enefeld, and John Hardel, all of whom, with the exception of Nicholas de Sancto Albano, received grants for life of dies at the London Mint on October 25, 1256. It is evident that these were connected with the London Mint as early as 1250, either as moneyers or in some other capacity, since we possess coins of nearly all of them of Class III. We may further conclude that John Terri was acquitted of the charge brought against him as he went on striking coins of Classes III. and IV. and received his grant for

life five years later. We possess, however, more precise information in the case of Nicholas de Sancto Albano, who appears for many years previously to have been associated with the Exchange if not with the mint of London, for already in 1242 he received a farm of the *Cambium* at London and Canterbury. As his name does not appear with those who were granted dies for life at the London mint on October 25, 1256, it is evident either that he was dead or had resigned his office. The former had happened, for the Patent Rolls, under date March 6, 1253, state that a grant was made to the prior and convent of Merton with respect to the houses which Master Nicholas de Sancto Albano had in Stanigelane in London, and which the abbot and canons of Wautham, executors of the will of the said Master Nicholas, sold to the said prior and convent. His death must have occurred either late in 1252 or quite early in 1253; and as he struck some of the earlier issues of Class IV., we can, I think, safely put the introduction of this type to some time in 1252, probably at the end. This attribution receives some confirmation in another entry in the Patent Rolls, which relates to the restoration of episcopal dies to Durham, and which is as follows:—

1253, *June 12 (Windsor)*. Restitution to Walter bishop of Durham of the dies, which he used to have at Durham, as it appears by trustworthy testimony and by the ancient dies exhibited before the king and also by the money coined thereof, which he showed before the king, that his predecessors used to have their dies at Durham; to hold to the Church of Durham as his predecessors used to have them.

Walter Kirkham was appointed to the See of Durham in 1249, and the earliest coins of the long-cross type

which we have of Durham are of Class IV.,¹⁶ so that if the bishop exercised his right of coinage so soon as the die was restored to the see, it is clear that this issue had already been introduced. This is, therefore, an additional reason for placing the commencement of Class IV. to 1252.

The other extracts from the Patent Rolls do not need much comment. It is, however, of some interest to note that though William de Gloucestre received in April, 1255, the grant for life of the die which had become vacant by the death of Nicholas de Sancto Albano in 1252 or 1253, he had doubtless the use of it from the latter date, as shown by the coins which bear his name. Further, it is interesting to note the succession of the moneyers at Canterbury. Robert de Cantuaria received in April, 1255, the grant for life of the die at that mint. In January, 1257, he was succeeded by his son of the same name. The latter's term of office was of short duration, for he was dead before the 1st October of the same year, and was succeeded by William de Gloucestre, who now appears to have been in possession of two dies, one in London, the other at Canterbury; or did he resign the former to take up the latter?

The addition of the sceptre to the King's bust was the last radical change in the type of the coinage, and this type remained unaltered until some years after the accession of Henry's son Edward I, as it was not until 1279 that the latter first placed his name on his coinage, which consisted of groats, pennies, halfpennies, and farthings.¹⁷ As the coins of Class IV. cover a period

¹⁶ There are no coins of Durham of Class III. in the National Collection, and Mr. Lawrence informs me that he has not met with any.

¹⁷ Ruding, *Annals of the Coinage*, vol. i. p. 191. An important issue

of twenty-seven or twenty-eight years, it is not surprising that such a large mass has come down to the present time. Though the type remained practically unchanged, there are numerous small variations of the obverse, which consist of slight differences in the head of the King, but chiefly in the addition of dots or pellets arranged around it. More often there are only two dots on each side; but these vary up to at least six or seven. The curls of the hair also vary in number, a small one being introduced between the two larger ones. No doubt with a sufficiently large quantity it might be possible to extract from these variations some order of classification; but in a limited hoard like that of Palmer's Green, the evidence is not sufficient; and even the National Collection will have to be considerably added to before any such results can be obtained.

The Irish and Scottish coins in the hoard do not call for much comment. The Dublin pennies were struck in or after 1247, there being no money previously issued for Ireland during this reign. When the long-

in connexion with this statement is that of Phelip de Cambio, who in 1278 was appointed a moneyer of the London mint in succession to Reginald de Cantuaria on the Wednesday preceding the feast of St. Dunstan (May 19) (*K. R. Roll., Pasc.*, 6 Edward I, no. 51, m. 5). [I am indebted to Mr. Earle Fox for this reference.] He struck coins of Class IV. with the head and sceptre and with the name of "Henricus Rex III." Hawkins (*op. cit.*, p. 195) has remarked on this issue, "There is one coin of this type (*i.e.* with King's head and sceptre) reading PHELIP ON LUND, which has the U in 'Lund' of the old English character, not the Roman V as upon all the others; the workmanship too is very different, especially about the hair, which is formed in wavy curls as upon the coins of the Edwards; whereas upon all the others it is composed of two curls on each side like the volutes of an Ionic capital, as on John's coins." It is curious that having remarked on the peculiar style of these coins Hawkins did not change his order of the classes. The differences are so marked that this issue might almost form a separate class of itself.

cross coinage was ordered in 1247, it was at the same time directed that stamps should be graven of a new incision or cut, and should be sent to Canterbury, Divelin, and other places. Four years later there was a further issue of pennies and halfpennies for Ireland, in order, as it is thought, to pay the large and frequent subsidies to Pope Innocent IV.¹⁸ There was, however, no change in the type. There are only two moneyers' names that appear on these Irish coins, Davi and Ricard; so the issue probably did not extend over a long period. Ricard alone was represented in the hoard, and his coins, numbering only five, presented no varieties whatever, though they may have been from different dies. The obverse type, the bust of the King holding a sceptre, is only an adaptation of the money of Henry's father; but the occurrence of the numerals III would lead one to suppose that they may not have been struck before 1248. These coins are of no assistance in settling the chronology of the English money.

The Scottish coins are of the long double-cross type, which are now attributed to Alexander III, and not as formerly to his father, Alexander II.¹⁹ They are of two obverse varieties; one with the head of the King turned to right, crowned; the other with the head to left, and also crowned. Of the former type, which according to Burns' classification is the earlier, the hoard contained only one specimen struck at Berwick; of the latter type this mint, and also those of Edinburgh and St. Andrews, were represented. Burns²⁰ has placed the issue of the

¹⁸ Simon, *Essay on Irish Coins*, p. 13.

¹⁹ Burns, *Coinage of Scotland*, vol. i., p. 112.

²⁰ *Ibid.*, loc. cit.

long double-cross coinage to A.D. 1250-1279 ; the introduction of the long single cross being contemporaneous with its institution in the English coinage.

It is somewhat difficult to fix the precise date of the burial of the Palmer's Green hoard. With the exception of the later moneyers, amongst whom were Alein of Canterbury and Phelip of London, it contained specimens of the coinages of all who issued Class IV., including those of Randulf of St. Edmundsbury, who was appointed to that mint *circa* 1258. I would, therefore, place the concealment of the hoard about 1260 or perhaps a little later.

H. A. GRUEBER.

APPENDIX.

List of the Mints with their officers (*Monetarii*, *Custodes*, *Assaiatores*, *Clerici*), which were ordered to strike money at the trial of the pix held on the Wednesday before the feast of St. Gregory in the 32nd year of Henry III, *i.e.* March 12, 1248 (see *Chronica Johannis de Oxenedes*, *Rolls Series*, Appendix, pp. 318-324). The names in italics are those of moneyers which occur on coins but not in the original list. Their appointment was probably due to vacancies caused by death or dismissal.

WINTONIA (Winchester).

<i>Monetarii</i> .	Nicholaus Cupping.
	Hugo Silvester.
	Willelmus Prior.
	Jordanus Drapparius.
<i>Custodes</i> .	Walterus Coleman.
	Robertus de la Dene.
	Walterus Ruffus.
	Johannes Aurifaber.
<i>Assaiatores</i>	Robertus Aurifaber.
	Petrus de Wormhol.
<i>Clericus</i> .	Robertus Poterel.

LINCOLNIA (Lincoln).

Monetarii .	Willelmus de Paris. Ricardus de Ponte. Willelmus Brand. Johannes de Luda. <i>Walter</i>
Custodes .	Alanus de Gaytone. Johannes Berne. Johannes filius Marenni. Henricus Cocus.
Assaiatores	Thomas de Bellofage. Johannes Aurifaber.
Clericus .	Hugo filius Johannis.

GLOUCESTRIA (Gloucester).

Monetarii .	Johannes filius Simonis. Ricardus le Francois. Rogerius le Emc̃pse. Lucas Cornubiae.
Custodes .	Johannes Marescallus. Alexander le Bret. Ricardus de Celař. Johannes de Esdrefelde.
Assaiatores	Willelmus le Eiche. Nicolaus de Theokebiř.
Clericus .	Henricus de Gloucestria.

OXONIA (Oxford).

Monetarii .	Henricus Simeone. Gaufridus de Scocwille. Adam Feteplace. Willelmus Sarsorius.
Custodes .	Laurentius Whit. Thomas sub Muro. Walterus Aurifaber. Johannes Alegod.
Assaiatores	Radulphus Aurifaber. Johannes le Flaminge.
Clericus .	Simon filius Rogeri.

NORHAMPTONE (Northampton).²¹

- Monetarii . Willelmus de Gangy.
 Thomas Rinne.
 Philippus filius Roberti.
 Lucas Parmentarius.
- Custodes . Philippus filius Roberti.
 Adam de Stanforde.
 Willelmus filius Johannis.
 Gaufridus Espiter.
- Assaiatores. Robertus de Arderne.
 Robertus filius Nicholai.
- Clericus . Hugo filius Johannis.

SALOPESBIRIA (Shrewsbury).

- Monetarii . Ricardus Pride
 Nicholaus filius Ivonis.
 Laurentius Cox loco Hugonis Champoneis.
 Petrus filius Clementis.
- Custodes . Robertus filius Johannis.
 Lucas filius Walteri.
 Johannes filius Rogeri le Parmentarius.
 Hugo le Vilain.
- Assaiatores. Thomas Aurifaber.
 Willelmus filius Hugonis.
- Clericus . Nicholaus filius Nicholai de Scawerburi.

WALLINGFORDE (Wallingford).

- Monetarii . Clemens Clericus.
 Ricardus Blaune.
 Alexander de Stanes.
 Robertus Pecok.
- Custodes . Johannes Robechild.
 Simon Canon.
 Johannes Hentelowe.
 Gaufridus de Wicke.
- Assaiatores Johannes Aurifaber.
 Randulfus Aurifaber.
- Clericus . Nicholaus des Estenẽ.

²¹ As already mentioned, see *supra*, p. 84, note 11, the name Norwicum is wrongly given here.

IVECESTER (Ilchester).

Monetarii .	Gervasius Gris.
	Hugo le Rus.
	Stephanus le Rus.
	Radulfus Fardein.
Custodes .	Robertus Fromund.
	Henricus le Cam.
	Rocelin Barhud.
	Walterus Witbred.
Assaiatores	Rogerus le Norais.
	Thurb Aurifaber.
Clericus .	Walterus Loue.

NORWICUM (Norwich).

Monetarii .	Hugo le Brunham.
	Jacobus Cocus.
	Willelmus de Hapesburge.
	Johannes Martun.
Custodes .	Gilbertus de Ley.
	Johannes Bartolomeus.
	Willelmus de Chalvern.
	Robertus Wenge.
Assaiatores	Martinus Averre.
	Henricus Aurifaber.
Clericus .	Robertus le Tanur.

EBORACUM (York).

Monetarii .	Johannes de Seleby.
	Alanus filius Sansonis.
	Raynerius Taliator.
	Germias de Bedegate.
	<i>Thomas</i>
Custodes .	Robertus filius Thomae Verdenel.
	Thomas Youel.
	Robertus filius Thomae Alby.
	Willelmus de Akaun.
Assaiatores	Henricus Spari.
	Ricardus Grusey.
Clerici .	Andreas de Sebeby.
	Petrus de Gamoc, ex parte regis.

KARLEL (Carlisle).

- Monetarii . Johannes de Boltone.
 Robertus de Chilay.
 Willelmus de Thiparun.
 Adam Caperun.
- Custodes . Thomas Specarius.
 Willelmus filius Ivonis.
 Alexander le Clerk.
 Henricus le Taliure.
- Assaiatores Willelmus Aurifaber.
 Adam Garald.
- Clericus. Willelmus filius Ivonis.

WILTONIA (Wilton).

- Monetarii . Willelmus filius Radulfi.
 Willelmus Manger.
 Johannes Berte.
 Hugo Goldrun.
- Custodes . Robertus filius Johannis.
 Adam Atte.
 Eað Herinç.
 Rocelinus de Gube.
- [Assaiatores] Johannes Acer.
 Mathaeus Bolegambe.
- Clericus . Willelmus de Biscopestede.

EXONIA (Exeter).

- Monetarii . Robertus Picon.
 Philippus Tinctor.
 Johannes de Egestone.
 Walterus Okestone.
- Custodes . Walterus de Moletone.
 Michael Pollard.
 Robertus Cissor.
 David de Medueye.
- Assaiatores Johannes Hamelin.
 Ricardus Bulloc.
- Clericus . Godefridus de Sowye.

HEREFORDIA (Hereford).

Monetarii .	Ricardus Mamworthe. Walterus Siward. Rogerius le Mercer. Henricus Hathefet.
Custodes .	Gilbertus Seim. Henricus Turg. Johannes Foliot. Nicholaus de la Punde.
Assaiatores	Ricardus Senior. Ricardus Junior.
Clericus .	Ingaunus de Sancto Mare.

BRISTOWE (Bristol).

Monetarii .	Jacobus Laware. Henricus Langbord. Walterus de Paris. Elyas de Aby. <i>Roger</i>
Custodes .	Jacobus le Clerk. Robertus de Kilmain. Henricus Adrian. Willelmus Senare.
Assaiatores	Petrus Aurifaber. Walterus Aurifaber.
Clericus .	Willelmus de Bruges.

NOVUM CASTRUM (Newcastle).

Monetarii .	Rogerius filius Willelmi. Johannes de Papede. Henricus de Karlel. Adam de Blakedone.
Custodes .	Thomas de Marlberge. Thomas Torand. Johannes Withelarde. Rogerius Russelle.
Assaiatores.	Ricardus de Westmele. Willelmus Aurifaber.
Clericus .	Adam Clericus.

H. A. G.

VI.

MONETAGIUM.

"Aluredus nepos Turoidi habet 3 toftes de Terra Sybi, quam rex sibi dedit, in quibus habet omnes consuetudines praeter geldum regis de monedagio."—*Domesday*, folio 336b. (Lincoln).

"Monetagium commune, quod capiebatur per civitates et per comitatus, quod non fuit tempore Edwardi regis, hoc ne amodo fiat omnino defendo."—*Charter of Liberties of Henry I*, 1100; see also Matthew Paris, sub Anno 1100, and Stubbs' *Select Charters*, p. 101.

THE above references to the tax called *Monetagium* have been made the basis for the assignment of exact dates to the issues of the several types of coins struck by the Norman kings of England. Mr. Andrew¹ has stated that this tax was introduced at some time subsequent to the Conquest, and that it "was, in effect, a compact between King and people, that in return for a hearth tax of twelve pence, payable every third year, the money should not be changed oftener than once in that period." Mr. Carlyon-Britton² follows Ruding³ in assigning to Du Cange the statement: "There was formerly a payment of twelve pence every

¹ *Num. Chron.*, 1901, pp. 13 ff. Explaining, however, that he believed the change referred to the legal tender and not to the types.

² *B. N. J.*, vol. ii., pp. 92-93.

³ *Annals*, 1840, vol. i., p. 163, note 2.

three years, due from each hearth in Normandy for moneyage, and for feuage, or the privilege of cutting wood in the forests for firing. It seems to have been peculiar to that duchy, and was paid, or at least one part of it, that the money might not be changed; for in those times the seigniorage which was taken upon every alteration of the coins was highly oppressive, and it was therefore commuted for by this tax. It was introduced into England either at the time of, or soon after, the Norman Conquest." Mr. Carlyon-Britton continues, "The duration of a type was thus fixed at a minimum of three years, and it may be regarded as certain that while this regulation was in force neither William I nor William II would allow a type to be of longer duration than three years. It therefore follows that each type, in the absence of the demise of the Crown, ran for a period of three years."

The statement attributed to Du Cange does not appear in any edition of the *Glossarium*; the explanation of *Monetagium* in this work⁴ is quite clear and of some importance; the primary sense given is, "Id quod Monetarii, seu Monetæ fabricatores, domino, cuius est moneta, exsolvunt ex monetariæ fusionis et signaturæ proventibus . . . (quotations from French charters, etc.) . . . Haec autem exactio quam nostri *Seigneurie*, quod ex monetæ signatura percipiatur, vocant, antiquis penitus ignota, sub prima Regum Franc. stirpe in usu fuisse videtur . . . (reason for this statement follows)." The second sense given by Du Cange is that to which Ruding refers:—"Praestatio . quae a tenentibus et vassallis domino fit tertio quoque anno, ea conditione

⁴ Du Cange, *Glossarium Mediae et Infimae Latinitatis*, sub "Monetagium."

ut monetam mutare ei non liceat, quae *Focagium* [et *Revelatio monetæ*] dicitur, obtinebatque potissimum in Normannia . . . (quotations from charter of Louis Hutin, 1315, pro Normannis; *Vetus Consuetudo Normanniae*; charter of Henry I of England, quoted above; French charter of 1319) . . . Haec eadem praestatio in minori Britannia⁵ obtinuit, ut in voce *Focagium* docuimus; concessa etiam aut usurpata ab iis quibus ius cudendae monetæ competeat, quod in plurimis Chartis legisse se testatur D. le Blanc, pag. 156 . . . (statement of its introduction into Aragon by Jaime I in 1236, and of its removal in France by Charles V in 1380; quotation from Peiresc) . . .”⁶

It is, therefore, clear that the use of *Monetagium* as a foundation on which to build a system of dating coin-types is itself founded on the assumption that the tax to which Domesday and Henry I's Charter of Liberties refer is identical with the tax which is known to have been instituted by William the Conqueror in Normandy, and that Du Cange first lent credit to this assumption by quoting Henry I's charter in this sense beside the *Consuetudo Normanniae* and French charters.

Stubbs is more cautious in the glossary to his *Select Charters*, where he translates *monetagium*, “mintage, a payment by the moneyers for the privilege of coining; otherwise explained as a payment by the subjects to prevent loss by the depreciation or change of coinage.”

In order to consider whether the English tax should

⁵ *Britannia minor* is, of course, Bretagne.

⁶ With the two other senses, “*Jus cudendi monetam*” and “*Monetæ officina*,” we are not here concerned.

be identified with that of Normandy, it is necessary to examine what we know of the tax in Normandy, of its use, its object, its institution and its result.

Du Cange we have quoted above; he says without ambiguity that it was a tax paid every third year to the lord on condition that he should not be allowed to change the money. To this we may add from the *Coutume de Normandie*⁷:—"Monetagium autem est quoddam auxilium pecunie in tertio anno Duci Normanniae persolvendum, ne species monetarum in Normannia decurrentium in alias faciat permutari. Unde sciendum est quod duo anni remanent liberi; et in tertio anno universaliter ab omnibus persolvetur qui [sc. habent] mobile vel residentiam in terris, in quibus monetagium solet reddi . . . (list of exemptions)." Here again it is described as an "aid" payable to the duke every third year in order that he may not change the money current in Normandy; thus two years are to be left free of taxation, and in the third a general payment is to be made by all property owners in lands where the monetagium is levied. To the notes of this edition of the *Consuetudo Normanniae* is added the quotation from Hale,⁸ "But this payment was never admitted in England. Indeed it was taken for a time, but it was ousted by the first law of Henry I as an usurpation." In both these cases the meaning of *monetagium* and its use in Normandy are quite clear; it is a tax levied triennially on condition of the duke ceasing to change the coinage, and in both cases it is assumed,

⁷ ed. Gruchy, 1881, p. 43.

⁸ From Sir Matthew Hale's *Common Law of England*. He quotes the Norman tax as a payment taken by the duke in order that he should not change his money, payable every third year.

without comment, that the same meaning must be attached to the tax in its English use.

Further information about the Normandy tax may be obtained from M. Lecointre-Dupont's letters on the coinage of Normandy in the *Revue Numismatique*.⁹ He shows how frequently the dukes of Normandy debased their coinage in order to profit themselves by the revenue thus obtained, and explains the *monetagium* to have been a concession made to the people by William the Conqueror; he further fixes the date of this concession as immediately preceding the Council of Lillebonne in 1080, because it was owing to the recent introduction of the agreement by which William was to cease the debasement of it that that assembly was called upon to fix the weight and fineness of his Norman coinage. It is quite clear from this that it was not the type but the standard of the money which the duke undertook never again to change, in fact M. Lecointre-Dupont says his promise was never again to *debase* his money ("promit de ne plus *altérer* ses monnaies" — the undertaking was not merely to leave it undebased for periods of three years, but to leave it perpetually undebased). M. Lecointre-Dupont then tells us the result of the concession. The duke's money was now fixed at a standard of purity exceeding that of the neighbouring lords, who immediately got hold of his new money and melted it down at their own mints, giving to Normandy in exchange their base deniers. Thus William was issuing money at a loss to himself; he therefore did the only thing that was left for him to do, namely, closed his mints in Normandy and issued no

⁹ *Rev. Num.*, 1842, pp. 114 ff.

Norman coinage at all, so that the only money circulated in Normandy was the base coinage of neighbouring barons.

Let us now summarize the salient features in the circumstances attaching to this peculiar Norman tax, and consider if any similar circumstances can be found in England to give us grounds for assuming that a similar tax was introduced into this country.

(1) Prior to the introduction of this tax the Norman money was continually being debased for the duke's personal profit.¹⁰ The English coinage, on the contrary, had from the earliest times retained its high standard of purity.

(2) In Normandy the tax was introduced as a concession to the people. In England we know that the tax was a burden (for its removal is one of the concessions made by Henry I in his Charter of Liberties in which he conceded certain limitations of his power and the renunciation of evil customs introduced by William I and William II), in fact, that it was one of the burdens imposed by William I (it is mentioned in Domesday and in Henry I's charter is spoken of as a tax "*quod non fuit tempore Edwardi regis*") and removed by Henry I as a concession to the people.

(3) It was instituted in, or very shortly before, 1080, in order that money should not be changed at all in the future as it had been in the past. In England no change of any sort appears in the coinage at, or about, this date; it remains as it was under the Confessor and continues so under William II; even the change of types seems to go on in the same way. Under William I we have eight

¹⁰ For the debasement of Norman money, see *Rev. Num.*, 1842, pp. 108 ff. (Lecointre-Dupont); 1843, pp. 52 ff. (de Longpérier); 1906, pp. 306 ff. and 1911, pp. 86 ff. (Luneau).

types for a reign of 21 years, under William II five types for 13 years, under Henry I fifteen types for 35 years.¹¹

(4) It resulted in the monetary standard having to be fixed by the Council of Lillebonne, a new coinage being struck at a loss to the duke, and the consequent closing of all Norman mints. No adjustment of the monetary standard was necessary in England at this time, nor does any seem to have been made; the currency does not appear to have undergone any alteration or reorganization.

We must therefore conclude that there is no true relation between the Norman and the English tax of *Monetagium*, or at least that no influence of the tax on the English coinage can be induced from the purpose and effect of the Norman tax bearing the same name. The nearest connexion we can suppose to have existed between the two is that the Norman tax suggested in the mind of King William a new method of triennial taxation under the threat of debasing the coinage if it were not regularly paid. Even this, however, seems an unnecessary conclusion when we do not even know that the English tax was paid triennially: we only know that there was a "*geldum regis*" called "*monetagium*" or "*monedagium*," which is the only possible word that could be used for a payment made for the right of issuing coins, and perhaps we may with better reason take it to mean quite literally what Henry I's charter explains it to be, "a general payment-for-right-of-

¹¹ In Edward the Confessor's reign also, if we eliminate the rare "*Harthacnut*" type, which probably only lasted a very short time and was not a true type of Edward's reign, we have ten types in a reign of 23 years, which gives precisely the same average as the succeeding reigns (see in *N. C.*, 1905, pp. 179 ff., Mr. Carlyon-Britton's arrangement of the coins of the Confessor).

mintage (monetagium) levied on cities and shires (quod capiebatur per civitates et per comitatus)," that is to say, a tax paid to William I by the cities and shires of the country in order to retain the right of having coins issued at the provincial mints¹²; this would be an usurpation as the cities or shires had in the Confessor's time the use of local mints without paying a tax for it, and therefore the removal of the tax by Henry I would be a concession in perfect agreement with the other clauses of his Charter of Liberties in which he renounces usurpations of his two predecessors.

Let us imagine the assumption correct that the Norman and English systems of Monetagium are identical. How can it even so affect the changes of types? It has already been shown that the evil for the remedy of which the people of Normandy undertook to pay twelve pence every three years was the debasement of the weight and quality of the coinage. A glance at the papers quoted above (see p. 103, note 10) will show clearly how bad the Norman money had become; the coins are irregular in shape, almost illegible, and—the really important point—of metal hopelessly base; the types were not undergoing frequent changes; on the contrary, the temple façade and the cross with pellets or annulets remained as obverse and reverse types, and became more and more degraded until they were scarcely recognizable. It is therefore quite certain that were the English and Norman taxes identical it could not be used to refer to alterations of the coin-types.

Again, supposing the tax to be identical in both

¹² It is thus identical with the payments *de Moneta* which are frequent in Domesday; Sir Henry Ellis (*General Introduction to Domesday*, p. 175, note 1) was of this opinion.

countries and supposing also that it were the coin-types that the King undertook not to alter: even so, it would give no ground for a triennial alteration of types; the changes were to cease altogether ("ea conditione ut monetam mutare ei non liceat"); the payment was triennial, the fixing of the coinage permanent.

In brief, *Monetagiūm* in England had not the same sense as it had in Normandy, and therefore had no effect on the English coinage. If it had the same sense in England as in Normandy, it would affect not the types but the quality of the coinage. If it had the same sense and could be understood to refer to the coin-types, it would not limit the changing of them to once in three years, but prevent them being changed at all.

Thus it is certain that there is no ground whatever for using *Monetagiūm*, take it to mean what you will, as a basis for prescribing a period of three years to each type and so fixing the date of each issue.

G. C. BROOKE.

WARWICK WILLIAM WROTH.

WARWICK WILLIAM WROTH, who died on September 26, 1911, after an operation following on a very brief illness, was born at Clerkenwell, London, on August 24, 1858. The staff of the British Museum Medal Room, and the whole body of students of ancient numismatics, have thus to deplore the premature death of a scholar from whom many more years of work might reasonably have been expected.

The son of the Rev. Warwick Reed Wroth, Vicar of St. Philip's, Clerkenwell, Warwick Wroth was educated at the King's School, Canterbury, and entered the British Museum as an assistant in the Medal Room on July 22, 1878. His sound classical training, combined with a remarkable memory and a genuine artistic taste, fitted him admirably for the work which he took up on Greek numismatics and archaeology. He contributed articles to the *Journal of Hellenic Studies* and the *Numismatic Chronicle*, and wrote also for the *Athenaeum* and the *Classical Review*. But his chief work was naturally embodied in the volumes which he prepared in the great series of Catalogues issued by his Department. When he began work on this series, it had already covered Western Greece and Greece Proper; the foundations of the system, as planned by Poole, Head, and Gardner, were laid, and a substantial portion of the structure already completed. Beginning with the Catalogue of the Coins of Crete and the Aegean Islands (published in 1886), he proceeded to deal with the northern and north-western portions of Asia Minor, the middle and southern portions being continued by his colleagues. Pontus and Bithynia, Mysia, Troas, Aeolis and Lesbos, followed in quick succession. After the completion of a somewhat miscellaneous volume containing Galatia, Armenia, and certain portions of Syria, he undertook the

extremely difficult series of the Parthian Kings. This volume, published in 1903, is one of his most useful pieces of work, presenting as it does an exhaustive view of all the available material. He now deserted Greek numismatics for Byzantine. The two stately volumes on the Imperial Byzantine Coinage, and the supplementary volume containing the coins of the Vandals, Ostrogoths, Lombards, and the Empires of Nicaea and Trebizond, were produced with remarkable speed, and at once took rank as the standard works on the subjects concerned. At the time of his death he had returned to the sphere of Greek numismatics, and was engaged on work preliminary to cataloguing the coins of Philip II and Alexander III and the later kings of Macedon.

Allied with his numismatic work proper was a series of biographies of numismatists, medallists, coin-engravers, and other persons, which formed his contribution to fifty-six out of the sixty-two volumes of the *Dictionary of National Biography*. Shortly before his death he completed the manuscript of the article on the late Sir John Evans for the supplement to that publication.

But probably—though this will interest numismatic readers less than what has been already said—Wroth was best known to the outside world as an authority on the history of London, especially in the eighteenth century. His admirable volume on *London Pleasure Gardens of the Eighteenth Century*, in which he was assisted by his brother, Mr. A. E. Wroth, and its supplement on *Cremorne*, showed a combination of scholarship and accuracy with pleasantness of style that is unhappily only too rare in works on London antiquities. He possessed a fine collection of prints relating to London, and his knowledge of English literature in general, and that of the eighteenth century in particular, was very considerable.

He was of a somewhat retiring disposition, and was in consequence personally little known except to those who came into contact with him in his official capacity. Outside official hours he preferred, especially of late years, to spend his time in reading or extending his acquaintance with the old London in which he was so keenly interested, rather than in taking part in the work and administration of learned

Societies, or in other objects which attracted many of his colleagues. But visitors to the Medal Room found him not merely courteous but genial, always ready to discuss difficulties or impart information, and those who knew him in this way will retain a very pleasant memory of their relations with him.

G. F. HILL.

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To this he contributed a very large number of biographies
of medallists, coin-engravers, collectors, and archaeo-
logists.

J. ALLAN.

MISCELLANEA.

SOME FURTHER NOTES AND OBSERVATIONS ON JEWISH COINS.

PERHAPS it will not be out of place if I add to my previous papers on Jewish coins, which the *Numismatic Chronicle* has kindly published, a few words by way of correction and expansion. Every wayside gleaning is valuable, if a full harvest of knowledge is to be reaped, and therefore with gratitude to those friendly critics, who have helped to put me right, I venture to add somewhat further to what I have written.

1. *The Type of the Jewish Shekels.* *Num. Chron.*, 1911, pp. 1-5.

I am indebted to the Rev. H. F. B. Compston, of King's

College, in the University of London, for the correction of a piece of rather careless writing in this paper. I said that "Simon" meant "the burst of spring." I ought more accurately to have said that "the burst of spring" or Thassi was a popular surname given to Simon to distinguish him from his four brothers, who also had similar surnames¹ (*vide* Stanley's *Jewish Church*, vol. iii. p. 269).

Simon—in Hebrew, שִׁמְעוֹן—is probably connected with שָׁמַע = to hear, while Thassi—in Greek Θασσι—is akin to the Hebrew נֶשֶׁךְ = first sprouts of the earth, and is connected with נֶשֶׁךְ = to be green, to sprout.

As Mr. Compston has generously pointed out to me, this does not in any way invalidate the argument of my paper. On the other hand, it adds to the point. The type of the coin would even more definitely denote Simon to its users, if his popular name were thus pictorially and symbolically represented upon it.

Further, "Dr. Torrey"—I quote Mr. Compston—"makes the interesting suggestions that the 'surnames' were the *original names* (*Enc. Bib.*, col. 2851), and that the scriptural names were those which they received later as *the princes of the Jewish people* (in the way that has been so generally customary with kings, popes, caliphs, etc.); and he instances Alexander Balas and Alexandra Salome" (*vide Journal of the Apocrypha*, April, 1912). If this is true, it adds considerable probability to the corrections of my interpretation of the type of the shekels and their certain attribution to Simon Maccabaeus.

It is just alike to the scholarly reputation of the *Numismatic Chronicle* as well as to my own to make this correction and to record my gratitude to Mr. Compston.

2. *A New Jewish Tetradrachm.* *Num. Chron.*, 1911, pp. 205-208.

A most interesting publication of this tetradrachm with a magnificent illustration occurs in a book written in the eighteenth century. This has been brought to my notice by Mr. H. D. McEwen. The book is entitled *De numis Hebraeo-Samaritanis*, was written by Francis Perez Bayer, and published at Valencia in Spain, where he was Archdeacon, in 1781.

This has not only escaped my notice, but the notice of such eminent writers on Jewish Numismatics as De Saulcy and Madden, and is a tribute to the excessive rarity of the coin.

While Bayer² figures the coin in other respects accurately

¹ 1 Macc. ii. 8.

² Tab. vi. 1, p. 141.

enough, he presents the obverse upside down, and is thus led into such curiosity of interpretation, that his words are worth quoting.

To begin with, in delightful simplicity he attributes the coin to Simon Maccabaeus, presumably because the name Simon appears on it—but numismatics was hardly an exact science in Bayer's day.

This is what he says of the type and its meaning—

“Is vero typus qua parte aedificii frontem exhibet Hasmonaeorum mausoleum designare creditur quod Simon in urbe Modin *super sepulcra patris sui et fratrum suorum aedificavit, altum visu, lapide polito ante et retro, cuiusmodi in Machabaeorum libris*³ *describitur, Josephus*⁴ *vero, opus visu mirabile appellat, cuius adhuc pyramidum vestigia eius aetate superessent*” (p. 145).

That is refreshing enough, but he goes on with even better things—

“Bouterovius, Calmetus, Froëlichius et alii in eandem sententiam inclinant, cui utcumque iuvandae posset et illud adiici, quod linea pro aedificio undatim serpens . . . mare fortassis referat, à quo non longe id aedificium aberat; cum Simon super columnas quas excitaverat *arma ad aeternam memoriam, et iuxta arma naves sculptas circumposuerit, quae viderentur ab omnibus navigantibus mare*”⁵ (pp. 145, 146).

Finally with unblushing conjecture he continues, describing the object between the pillars in the centre of the coin—

“Lyra vero in porticus sive aedificii medio conspicua ad restitutam Machabaeorum ductu ac robore Iudaicae genti laetitiam referri potest; nec propterea loco non suo collocatam quis dixerit, quod alias parum sepulcris congruat.”

And as an excuse for this amazing guess, he adds that the lyre is frequently found upon Jewish coins.

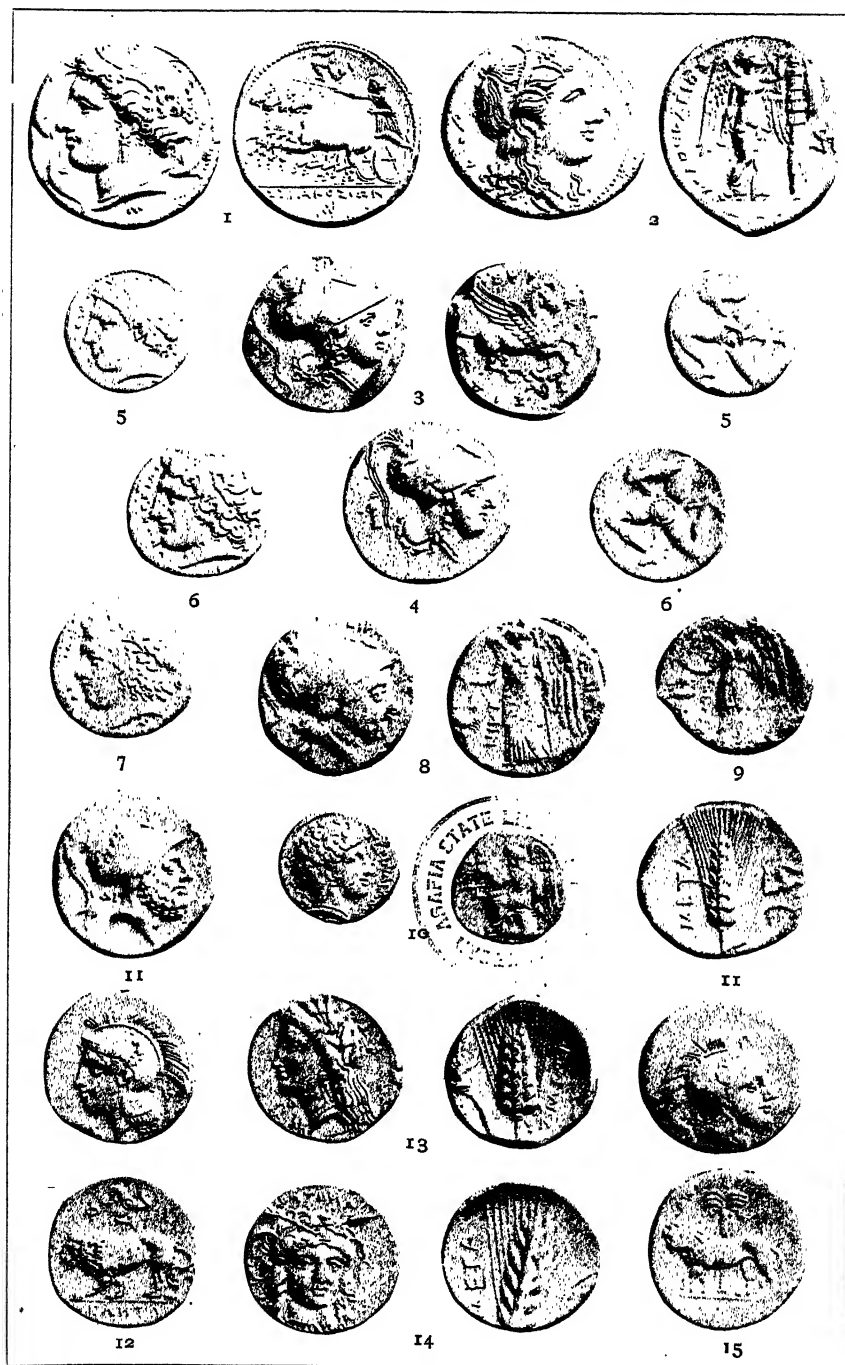
Bayer was no Doctor Dry-as-Dust. May he rest in peace. He deserves well of us.

EDGAR ROGERS.

³ 1 Macc. xiii. 27.

⁴ Josephus, *Antiq.*, xiii. chap. vi.; alias xi. n. 4.

⁵ 1 Macc. xiii. 27.



AGATHOCLES
AND THE
COINAGE OF MAGNA GRAECIA



A HOARD OF COINS OF KOS



1



2



THOURIOI



3

CUMAE



4

TERINA



5

TERINA



6

PANDOSIA



7



8



PANDOSIA

WORKS BY Φ



9



10

TERINA: Γ



11



12

ELIS



13

TERINA
Imitation of Elis



14



15
KIMÔN: 3^d MANNER



16
KIMONIAN: TERINA



17



18
EVAENETOS
LATER MEDALLION



19
EVAENETOS: TERINA



Prototype of Evaen., at Terina



20
EVAENETOS: TERINA



21



22



BRETTIAN TYPE



23

MASSALIA



24

TARENTUM



25

SYRACUSE



26

TERINA





I
KIMONIAN
TYPE



2



3



2

EVAENETOS



4

MASSALIA



5

TARENTUM

VII.

THE ELEMENTS OF PRIMAEVAL FINANCE.

THE factors which governed the economics of earliest man were simple and forcible.

“The good old rule, the simple plan,
That they should take who have the power,
And they should keep who can.”¹

This rule would apply to the earliest form of government by self help, as opposed to that exercised within a community, however crude and elementary.

The idea of common wants is at the basis of civilization, the true dawn of which is to be found in the pairing of human beings. The peaceful exchange of necessary commodities between members of a community marks the genesis of trade and commerce.

For of a certainty, the peaceful exchange of goods, without the application of force, is the primary essential of all commercial dealings.

The earliest form of community was that of man and wife with their attendant offspring. Within the precincts of the family, an ordered rule would be maintained by the physically strongest member. Outside the realms of governed order, the primaeval law must remain in force for ever.

The family of one man would grow with time, and

¹ Wordsworth, *Rob Roy's Grave*.

increase into a number of families. Living in separate huts, each would be governed by its own *pater familias*, and the whole community would be ruled by one patriarchal head.

Though what is known as the patriarchal may be only one of the many forms in which early communities developed, yet they would all have the common characteristic of an unwritten law directed towards the maintenance of peace, enforceable by the chief, or the ruling body which naturally took his place.

It is a natural law that with the growth of a community, each individual unit becomes less self-supporting. The power of acquisition under the *primaeval* rule becomes limited, and another mode of obtaining fresh and necessary material is required for the maintenance of prosperity. To take an example from the more common exigencies of a pastoral life: a bull from outside was needed to prevent inbreeding and deterioration of the stock. Owing to the patriarchal or other early form of rule, it was impossible to take one by force; in consequence, a peaceful exchange for another animal belonging to some other member of the community became the natural means of acquisition. So it was with other necessities, even to the purchase of a wife, which formed a most important factor in the economy of early races, as it does with the less civilized communities of to-day.

Peace, being assured within the home circle, naturally spread without amongst those whose intercourse was daily, and whose interests were the same. The benefits of the quiet enjoyment of property having been once realized, pains would be taken to preserve it even at some cost. A price of peace consonant with the dignity

of the parties would automatically come into being. At first it would take the form of a surreptitious bribe, intended to curry favour with a more powerful neighbour. This in time would become a recognized tribute, when custom allowed of its open payment. As a consequence, the protection of the community against enemies would become the duty of the tribute taker, and to a certain extent the tribute would be used for this purpose.

On the other hand, between equals, a treaty of peace would be clothed in the guise of an alliance of marriage, or an exchange of gifts, and the price of a wife would constitute one of the forms of the price of peace. The old custom of carrying off a wife, and the consequent internecine and Homeric struggles, would become the exception rather than the rule. Marriage would become the basis of a treaty of peace between the contracting parties, and the existence of the wife-mother from another community would be the guarantee of its stability.

In this we find the true significance of marriages negotiated between the rulers of the ancient communities of the old world.

This price of a wife from the outer world was one of the first instances of the direct and peaceful export of the goods of one community into the bounds of another, and the exchange of gifts would be another. The two together constitute the beginnings of foreign commerce, and are both variant forms of the price of peace.

The custom of exchanging commodities of equal value was naturally limited to those persons between whom conditions of peace existed, and would, to a great extent, be local in its observance. Professor Ridgeway² has

² *Origin of Weights and Currency.*

pointed out its gradual development, and has shown that when some special article was required from a distance, it was ultimately obtained by a series of deals effected between neighbours over a long distance. This indirect trade cannot, however, be classed with direct foreign commerce.

Its natural development within a friendly community runs, however, on different lines. Amongst the various families which formed such a corporation, the strongest would eventually provide the ruler over them all. Between the different units order would be preserved, and security of property would exist, if the price of peace were paid, and the *primaeval* law thereby abrogated. This tribute—and also the price of a marriage contract when made—must have been paid in kind, and the exact amount would have been stipulated.

A tribute would take the form of so many head of cattle, *or* so many measures of corn, *or* so many *values* of some other commodity.

In this alternative is found the origin of a fixed and standard *value* in which different classes of commodities could be reckoned. The receiver of tribute would appraise and rank the articles which he would receive as such. Within his domains the scale which he had authorized would become customary, and would govern the equal exchange between members of the community.

Hence we should expect to find in an elementary community paying tribute to a ruling class, or to an autocratic ruler, a system of barter in which the various amounts of different classes of commodities, which were equal in value for exchange, were regulated by their rank in the payment of tribute.

This scale of values naturally only held good within

the boundaries of the tributary clans to which it belonged.

Wealth in precious metals had no privileged position in such a system. It ranked ἀπλῶς ἴσως,³ *simply equally* with other forms of property.

Such, probably, was the course of the development of equal barter within the precincts of a community. There was no tendency in it to make a good bargain, or to gain profit. The simple exchange of superfluous, or less needed, commodities, for others which were necessary, was the only object in view. The extent of this form of exchange is naturally limited to those whose intercourse is friendly, and who are members of the same community. It is the basis of Domestic Economy, as understood by Aristotle, and any acquisition of wealth that takes place under it is natural, and comes from the increase of stock, or the fertility of the land, and is not due to profit on an exchange.

Now, it has been pointed out that the bearing of gifts to a foreign court would be the beginning of export trade.

In a foreign country with different resources, and another tribute taker, a varied scale of alternative *values* would have become customary. To a certain extent, the ambassadors bearing gifts would be impressed with the different values that obtained in different countries. It would require, however, a continued contact with two different scales of value, to give sufficient intimacy with them and to accentuate the potentialities of foreign trade. For instance, in one country ten oxen might be worth thirty sheep, and in another forty. The chance

³ Aristotle, *Polit.*, i. 9. 1257b, 3.

of obtaining ten sheep for the trouble of shipping the necessary oxen would be apparent. The opportunity, however, of taking advantage of it would also be necessary.

Both the object-lesson and the means of benefiting by it were given to the carriers, and they it was, who eventually became the pioneers of foreign and international commerce.

We see, therefore, that the basis of Domestic Economy consisted of equal barter, upon a fixed scale, of goods which were necessary commodities; while Foreign Commerce was based upon the scientific distribution of goods in communities where the desire for them was the greatest, and their rank in the domestic scale, therefore, the highest.

The acquisition of wealth within the home circle was gained from the increase of stock, and the produce of the land. To gain wealth by trade, travel was essential, and was in fact the dominant factor of finance. (This element of travel has been so much neglected, that it is necessary to insist very strongly upon it.) The object of foreign trade was to exchange a commodity at a profit in a country where the supply was insufficient, or at all events relatively small.

Aristotle, therefore, though he differentiated between Domestic Economy and what he terms Finance (*χρηματιστική*), failed to note that equal barter was the basis of the former, and that the acquisition of wealth was not only fundamental to foreign trade or finance, but its actual cause in the beginning.

It must be borne in mind that a sufficiency, and not a superfluity, of wealth was the desire of early man. The desire for superfluity was bred in the wish of the

merchant to satisfy his ambition, and to demonstrate the success of his trading. It follows, therefore, that within a self-contained country, only a simple system of equal barter was necessary, based upon a fixed *value*. This *value* was originally expressed alternatively in different kinds of wealth, and in no particular one of them was it originally formulated.

The Greek *τάλαντον* is probably derived from a root which meant "to carry,"⁴ and may have originally had the force of "what was carried in tribute." Its later Homeric meanings of (1) scales, (2) a standard weight of some material, are instructive. For the material in question had to be weighed first of all to ascertain its quality, or specific value; and a quantity thus appraised could then be reckoned in valuable amount by units of weight.⁵

⁴ O. Schrader, *Reallexikon der indogermanischen Altertumskunde*, points out that the Greek *τάλαντον* is related to *ταλάσσαι*, *τλήναι*, "to bear (or carry)"; *τάλαρος*, "a basket for carrying," Latin *tollo*, "I lift (or I carry)"; Sanskrit *tul*, originally, "to lift (or to carry)," then "to weigh."

⁵ There is a passage in the *Odyssey*, 8, 392 *seqq.*, which illustrates this—

τῶν οἱ ἕκαστος φᾶρος εὐπλυνὲς ἥδ' ἐχιτῶνα
καὶ χρυσοῖο τάλαντον ἐνείκατε τιμήεντος.
αἴψα δὲ πάντα φέρωμεν Ἀολλεία, ὅφρ' ἐνὶ χερσὶ
ξείνος ἔχων ἐπὶ δόρπον ἢ χαίρων ἐνὶ θυμῷ.

"Now each man among you bring a fresh robe and a doublet, and a talent of valued gold, and let us speedily carry all these gifts together, that the stranger may take them in his hands, and go to supper with a glad heart."

The word *τάλαντον* is here used in connexion with the verb *φέρειν*, which had the technical meaning of bearing tribute. *φορὰ* was the recognized Attic word for tribute, and is itself derived from *φέρειν*, *φορὰν φέρειν*, to bear tribute.

The expression, *ἐνὶ χερσὶ ἔχειν*, is also, technically, to receive tribute. The phraseology of the whole passage is not only redolent of expressions applicable to the payment of tribute, but the second line in itself gives the whole act of tendering it in gold: "bring

We are tempted, therefore, to compare the meanings of the English *scales* and *scale*. For *τάλαντα* would have the former significance; and the weight of the *τάλαντον* would give the position in the *scale* of values for barter or tribute appropriate to the material in which the talent was expressed. Thus we find talents of wool,⁶ talents of worked hair,⁷ as well as talents of gold and silver. For each material the talent had a different weight, but its value in every case was probably at one time identical. A talent would therefore be a *value* expressed in weight, and the sequence of its meanings distinctly corroborates the development which we have suggested for the standard *value* in domestic economy.

The Egyptian *deben*, too, had the same significance of a standard *value*. In fact, the first mention on record of the term (XIIIth Dynasty), gives a peculiar example: "Then he gave me a heap of ten *deben*, supplied with dates and half an ox."⁸ "Heap" is a word commonly designating a pile of offerings: "of" means "of the value of." The material of these *deben* is so heterogeneous, that no meaning of a standard weight or quantity of any fixed article can even be inferred—the only intelligible significance is value. This is corroborated by the addition together of *deben* of gold, electrum, and silver, to make one sum in the inventory

a talent of valued gold." A weight of gold was paid, after it had been first valued.

The passage, too, gives an excellent example of the payment of the price of peace, which is given to this stranger who comes into the camp.

⁶ Aristophanes, *Vesp.*, 1147.

⁷ Polybius, 4. 56, 3.

⁸ Breasted, *Ancient Records*, Egypt, i. 785. Inscriptions of Ameniseneb, *temp.* Khensar, XIIIth Dyn.

and valuation of the goods of Rameses III given by the Harris Papyrus.⁹

Beyond equal barter on the basis of the standard *value*, there would be no need for a self-supporting country to go. In fact, we know that 'Egypt never felt the need of a coinage before it became thoroughly subjugated to the customs of the Greeks. It follows, therefore, that foreign trade did not enter into Egyptian internal politics, and that the acquisition of wealth, other than the natural produce of the land, was not an object in life to the ordinary Egyptian.

Egyptian foreign trade was of a distinctly limited nature. No foreign merchants were allowed to have a *depôt* within the country. Naukratis, the first open port, was a concession to the Greeks in the fourth century B.C. Foreigners were only allowed to settle temporarily in the Delta. There is, however, no evidence that even they were other than shepherds.

The "Shepherd" Kings of the middle dynasties were probably members of these races, who gained an entry into the country by false pretences. There is, however, at present no sufficient evidence of their identity.

The great expeditions to foreign parts undertaken by the Egyptians were usually royal enterprises, and no element of general trade entered into their economy. When undertaken by others, they would, more often than not, take the form of private ventures, or predatory expeditions, such as the men of Devon and Cornwall used to fit out in the sixteenth century of our era. The persons involved were the principals, and not agents; the object of the expedition was for some specific want,

⁹ Breasted, *Ancient Records*, iv. 151 *seq.*

and not for general profit. The merchant, on the other hand, was essentially a middleman, and his profits those of his class.

Besides this, it must be noted that the travelling of some Egyptian citizen upon the waters of the "Very Green,"¹⁰ or Mediterranean, would in no way affect the condition of the landward community. The traveller would, for the time being, enter into the commercial community of the Sea, and would have to obey its laws and customs. If he could hold his own amongst the merchants, and return home with a cargo of goods, he would re-enter his country with other possessions than he had taken away with him. That was all. His newly acquired goods would automatically come under the scale of *values* which existed at the time, and could be exchanged by equal barter with other forms of commodity.

Again, the necessity of travel in order to gain a profit on exchange is forced into view, and must always be kept before us, in the consideration of the earliest developments of finance.

In countries, however, which were not self-supporting, foreign trade would of necessity become part and parcel of their civilization. But civilization in such countries would be of a fostered growth, and would spread from the "factories" of the traders, situated near the source

¹⁰ Maspero, *The Dawn of Civilization*, p. 17. The name *Uaz-oirit* (*Uaz-ur*), the *Very Green* was first recognized by Birch (*The Annals of Thothmes III*, in *Archæologia*, vol. xxxv. p. 162, and p. 46 of the reprint); E. de Rougé (*Notice de quelques textes hiéroglyphiques récemment publiés par M. Greene dans l'Athenæum français*, 1855, pp. 12-14 of the reprint); and especially Brugsch (*Geog. Insch.*, vol. i. pp. 37-40), completed the demonstration. The Red Sea is called *Qim-Oirit*, the *Very Black*. Petrie, "Great Green Water."

of some supply. These peoples would be of two classes, those of the land, and those of commerce. Their civilization would be of a hybrid nature, and their ideas of economy governed chiefly by the personal equation. The strife between these rival factions is well exemplified in historic times by the local struggles amongst the inhabitants of the Ionian Islands.

On the other hand, the development of finance in communities whose existence was based upon foreign trade, such as those of Crete and of "the isles of the Great Circle,"¹¹ and the seaport settlements of the Mediterranean, would be essentially different. Their object was frankly and avowedly the acquisition of wealth. Its attainment was the proof of a successful life.

How, then, was the merchant, whose business it was to carry and dispose of commodities, to acquire great wealth by retaining them in his possession? He must have some means of giving an outward sign of his great riches,—there was no joy in the possession of goods always in transit. His wealth always had to be realizable, both to the senses, and in the technical meaning of the word of the Twentieth Century A.D. Some reserve fund had to be made of goods other than those which were perishable. A hoard against the risks and perils of travel was necessary. Some currency acceptable by all traders, before the days of notes of hand, had to be devised, for, without it, commerce would be stifled. For ready cash was as necessary to trading, as breath was to the body, especially in the days when credit was unknown.

¹¹ Breasted, *Ancient Records*, ii. 78.

There would be no standard *value* possible amongst a race of bargainiers. For it was their business to bargain with the different *values* of different countries.

Hence they made use of precious metal, durable, compact, and desirable material; in the earliest days, they chose bronze and copper, from which weapons and utensils could be made; slightly later, silver, which became "current with the merchant";¹² last of all, in the days of pomp and luxury, gold, the most immutable and the most desirable of them all.

As a direct consequence of this, the standard *value* of the various communities, when expressed in precious metal, and finally in gold, became the dominant form, so that in the time of Pollux the idea became inverted, and a gold coin was always a *στανήρ*, or *valuer*.¹³

The foregoing sketch of the separate beginnings of Domestic and Foreign Trade will lead us to the conclusion that the precious metals became naturally the currency of the merchant. At the same time, domestic trade in a self-supporting country developed a system of alternative values, whose equality was given in standard units of value, which might be expressed in any recognized form of commodity. The combination of the two, or the local *value* expressed in precious metals, in later times constituted the coin.

Now, the Greeks had a system which was a mixture of the two. Some, like Solon, boldly took the risks of foreign adventure, some, like the Arcadians, stayed peacefully at home amongst their flocks and herds. Others, like the Argives and the Aeginetans, became pedlars and shop-keepers,—a very necessary class where

¹² Gen. xxiii. 16.

¹³ Pollux, ix. 59.

stores of foreign made goods were needed for the everyday use of the community—though of a certainty a despicable class in an elementary community. Their courage was not great enough to allow them to take the chance of the perils of travel, their industry was not sufficient to earn the comparatively small but steady profits of agriculture; but their greed, and the cunning of their wits, enabled them to drive hard bargains, and—contrary to Aristotle's natural law—to earn their livelihood at the expense of fellow-members of their own community. From this class, much later, sprang the money-lenders, who, from the safe basis of Aegina, gained possession of the mortgages on Attic land, and reduced to poverty the agricultural population of that state. To this class a local currency was a necessity, in which to hoard for opportunity their superfluous wealth, which could only be expressed in such a form, or in the intangible security of a mortgage on land, slaves, or person. These last conditions, however, only came into being in historic times.

But, though this digression is necessary to exemplify the three peaceful developments of commerce, the existence of such a race of pedlars was not possible till quite late, when the "King's peace" was enforceable upon the highways. Protection to the high-roads and sea trade-routes only came after the pioneers of commerce had established them. And those times were not yet.

Let us, therefore, return, and demonstrate clearly that wealth in precious metals held no privileged position among the early Egyptians. For their country gives us the necessary example of a self-contained and self-supporting community, which grew into great power and prosperity in the most ancient times.

The records left by the Egyptians cut upon the rocks, the walls of temples, and the sides of tombs, give ample material from which to deduce the facts.

From the small number of references to precious metals before the time of the XIIth dynasty, we must consider that they formed no important factor in the internal economy of ancient Egypt. From the rewards received for services rendered, agricultural produce, beasts, implements of peace and war, seem to have constituted wealth. In the earliest times, land was also included, but this was before the times when the country was wholly in occupation. In the *Biography of Methen*,¹⁴ a governor under Snefru, IIIrd dynasty, we find that the rewards conveyed to him were "20 *stat* of land, 50 *stat* to his mother, 12 *stat* to his children, with people and cattle."

The first mention of gold is in the *Inscriptions of Sebni*,¹⁵ Pepi II, VIth dynasty. He says: "There was given to me the gold of praise." This was evidently some decoration that he could wear. The symbol for gold in hieroglyphics is a necklace with beads, and this is the form that the decoration may have taken.

There is found a weight applicable to gold with the cartouche of Chufu, IVth dynasty,¹⁶ but this is undoubtedly a case of the dedication of an object to a bygone monarch whose record was good.

The smallness of the amounts, and the objects which were made of gold, show that its uses were almost entirely limited to decoration and ceremony.

¹⁴ Breasted, i. 175.

¹⁵ *Ibid.*, 372.

¹⁶ *Proceedings of the Society of Biblical Archaeology*, vol. xiv. p. 442. There is no mention of standard weights before the time of the XIIth dynasty.

A contemporary account of the prosperity of Egypt is given by the *Teaching (sic) of Amenemhet I.*¹⁷ XIIth dynasty, and shows conclusively the proportionate values attached to agricultural and metallic wealth.

“I was one who cultivated grain, and loved the Harvest God ;
 The Nile greeted me in every valley ;
 None was hungry in my years, none thirsted then ;
 One dwelt in peace through that which I did, conversing
 concerning me.
 All that I commanded was correct.
 I captured lions, I took crocodiles,
 I seized the people of Wawat,
 I captured the people of Mazoi,
 I caused the Bedwin to go like hounds.
 I made a palace decked with gold,
 Whose ceilings were of lazuli . . .
 The doors were of copper,
 The bolts were of bronze,
 Made for everlastingness,
 At which eternity fears.”

There is a quaint conceit about this, and a certain poetic utterance. It is the simple story of a ruler, in whose country the “King’s peace” is kept. The people live in prosperity, blessed with agricultural riches. The Nile rises with regular inundations, and gives no cause for anxiety. Everything turns out well, and the mind of the responsible ruler is at rest. He can spare time to enjoy the hunting of lions and crocodiles. When foreign people invade his borders, he hunts them. He enjoys the sport ; they do not interfere with his peace of mind. He captures the Nubians, and takes their golden ornaments ; he makes the Bedwin run, as we

¹⁷ Breasted, i. 488 *seq.*

should say, like stags. He gains nothing by catching them, but it amuses him to see them run.

Then to his simple mind comes back the thought of the trophies which he has captured from the Wawat and the Mazoi, and he tells us how he decked his palace with the gold, and, incidentally, how it had a ceiling of *lapis lazuli*—blue, probably sprinkled with stars. —

Then he bethinks himself of the copper of his country, from which the doors are made, and of its manufacture into bronze for the bolts. The working of copper is already far advanced. He is proud of it, the staple wealth of the country apart from agriculture ; his implements of war and peace are made of it. It is his security “made for everlastingness, at which eternity fears.”

There is a feeling of reverence displayed towards the heavy and strong material, the undoubted mainstay of his land, the supply on which he relied. His peace was probably assured because “copper was plentiful without end, bronze without limit,”¹⁸ as it was in the days of his successor Useretsen (Sesostris) I.

Hence we have his wealth classified simply, (1) The agricultural riches given by nature ; (2) The bronze and copper wherewith to cultivate and protect those riches ; (3) The gold, accidentally and opportunely obtained, with which to decorate the whole.

He has sufficient, and needs not a wherewithal to obtain more.

But whether it be from contact with the merchants or from the pleasing effect of the trophies obtained by hunting the Nubians, the desire for gold is born. The old man, in the last year of his reign, desires fresh

¹⁸ Breasted, i. 534.

trophies of gold to hang on the walls of his palace. He can no longer hunt, yet he craves for new spoils, probably that they may remind him of his sporting days.

The love of chase for acquisitions has changed into the love of hoarded possessions. The curse of Mammon has fallen.

The epitaph of Amenemhet I is cut on a rock near Komsko at the Second Cataract. It is dated the very last year of his reign, and says simply, "Amenemhet came to overthrow Wawat."¹⁹ The inscription goes no further.

From this time onward, there are almost continuous records of expeditions to Nubia, either for conquest, or to exact tribute, until finally that country, with its assured revenue in gold, became a province of Egypt. The gold, however, was the property of the king, and not a general form of merchandise. It therefore can be said for certain that gold only became a staple form of wealth within the borders of Egypt, as late as the time of the XIIth dynasty, and that, out of many others, it was but one, though an important, form, primarily passing through the hands of the king.

It must be carefully noted, that directly subsequent to the assured possession of gold as a form of wealth by the Egyptians, the conquest of the country by some foreign race took place; and it was not till the time of the XVIIIth dynasty that the country was reorganized as an independent kingdom.

The fact that the precious metals were the currency of the traders would lead us to suppose that these conquerors were of that calling, and belonged to some

¹⁹ Breasted, i. 473.

merchant race who inhabited the coasts or islands of the Mediterranean. Their descendants may perhaps be found in "the twenty-two kings of the Hatti land who dwelt by the sea and in the midst of the sea."²⁰

The real reason why Egyptian internal economy retained a system of equal exchange long after the precious metals became the dominant form of wealth outside its borders may incidentally be suggested here. Egypt was a gold and copper producing country, and these metals, for all internal purposes, would take rank naturally with other forms of produce. Travel was not necessary to acquire wealth in them. Hence no exaggerated idea would be formed of their value. In addition, since dealings in them could not be made at a profit within the country, they would be but an unproductive form of wealth; and, in the earliest days, no desire would naturally arise for their accumulation.

The further development of the *deben* or value into a measure of weight in gold comes at a much later time. The use of weight was at first but elementary in its nature, and it was employed for the precious metals in the place of, or alongside of, the customary measures of capacity. The development of its uses cannot, however, be dealt with here.

The scheme of elementary finance may thus be simply stated. There developed early amongst semi-civilized people inhabiting an area of country over which communications were easy, a system of tribute paid to the strongest amongst them by the various tribes, as a price for peaceful occupation, and a security for personal property. The ruler, or his treasurers, would draw up

²⁰ Hogarth, *Authority and Archaeology*, p. 111.

a list of what he would take out of the personal goods of the tributary families or tribes by way of payment, and he would assess certain recognized commodities in quantities of equal value as the unit of tribute. Upon this unit of value would be based a system of equal barter throughout the community.

In every settled self-supporting community, however large or however small, there existed originally this system of equal barter, based upon the unit of value of tribute. The best example of such a community was Egypt, and the unit was the *deben*, in which the value of all classes of commodities could be reckoned. A better word expressing a standard value is found in the Greek *τάλαντον*, which is probably derived from the bearing of tribute. (Another word, the Greek *στατήρ*, *valuer*, came into being later, when precious metal was used to express the unit of value, and meant the unit of value so expressed, and in which the values of other commodities could be reckoned.)

In any of these communities, it would originally have been considered criminal to make profit by an exchange, out of a member of the same community. There would, however, as in every time, be persons to whom honesty was unknown; but such would be exceptions within the borders of civilization.

It appears certain that in different communities situated at a distance from one another, a different official table or scheme of equal values would govern the equal barter of the country, for the produce of the countries would be different, and in one, skins of animals and furs might be the most valued commodity, while in another, wine, oil, or cattle would take the highest place. Around these communities, and trading at a profit upon

the difference in the scales of value of different goods in the various countries, existed a race of carriers, who became the first merchants of the world. The very cause of this class as an independent race was the desire to acquire wealth by foreign exchange and travel. Travel was the work, the labour, the effort, by which riches were to be acquired. Travel was, therefore, the essence of this calling of money-making. It was the moral justification of acquiring wealth by other means than the ordinary productive powers of nature.

These men required for themselves a peculiar form of wealth, other than agricultural produce, in which to realize their gains, and that took the form of a currency in precious metal. This metal, when manufactured of an amount equal to the local unit *value* belonging to a country, became naturally a coin, or *στατήρ*, of that country. The coin was therefore the joint produce of the two systems of exchange.

Outside these two distinct classes were two others. An important class were those who obtained their livelihood by manufacturing goods, or by mining, or by some free employment which entailed labour and skill. Their profits were sanctioned by their personal toil. The other, and a degenerate class in an elementary community, were the pedlars, shop-keepers, and later, the money-lenders, whose wealth was gained chiefly from the profits made in getting the better of a deal with members of their own community. Both these classes could well be contained in either of the chief divisions of commercial communities, without altering the condition of the whole.

In its greatest simplicity, therefore, early commercial life may be said to have consisted of two classes, namely,

those who gained their livelihood by the natural produce of the land and their own skilled labour at home, and secondly, those who, by the risk and danger of travel, accumulated superfluous wealth from dealing in goods which had in different countries a sufficiently distinct degree of value to make trade in them lucrative.

There would seem to be little difference in this from the state of affairs that holds good now, but when it is considered how simply the coinage of each country developed in later times from the manufacture, by these very early merchants, of a weight of fixed value in precious metal equivalent to the standard value of each country, we can see definitely and clearly the beginning of civilized trade and commerce before the days of a recognized currency. Here, therefore, we appear to have in all simplicity the primary elements upon which finance was originally founded.

JOHN R. MCCLEAN.

VIII.

GREEK COINS ACQUIRED BY THE BRITISH MUSEUM, 1905-1910.

(See Plates VI., VII.)

IN resuming the series of articles on the acquisitions of the British Museum which the late Mr. Wroth contributed to the *Numismatic Chronicle* until the year 1905,¹ it seems best to clear the ground by a preliminary article describing a small selection of Greek coins acquired during the six years 1905-1910. In a subsequent article I hope to deal more fully with the acquisitions of 1911 and 1912, and afterwards to carry on the series with regularity, possibly at intervals of two years.

The selection may appear to be somewhat meagre. But in order not to occupy space, I have omitted a large number of coins which would have made more show, either because they have been acquired at sales, in the catalogues of which they have been described and, in important cases, illustrated; or because they have been acquired with a view to completing a series of which the official catalogue is or was at the time of the purchase in preparation; or, finally, because they have been published elsewhere since their acquisition. Under the

¹ Mr. Wroth's last article included one or two coins acquired in 1905, but was not representative of the acquisitions of that year.

first category come, for instance, coins acquired from the sales of the following collections: Strozzi,² E. F. Weber,³ and Philippsen.⁴ Under the second, large purchases, especially of Macedonian regal coins (on the catalogue of which Mr. Wroth was engaged at the time of his death) and of Jewish coins (including 2616 specimens from the Hamburger Collection). Under the third category come, above all, the remarkable coins of Peparethus, published by Mr. Wroth in the *Journal of Hellenic Studies*, vol. xxvii. pp. 90 ff.; and also coins like those of Metellus in Crete and Brutus in Macedon (if that counts as a Greek coin).⁵ But even when these exclusions are taken into account, it must be admitted that these have been but lean years, the rise in the price of fine coins making it quite impossible for a Museum to compete with the private collector.

I have added to the descriptions of the coins an arrow indicating the position of the axis of the reverse die in relation to the obverse.

BRUTTIUM: CAULONIA.

1. *Obv.*—KAV Naked male figure advancing r., wielding branch in r.; on his outstretched l. small running figure; in field r., stag r. with head reverted; cable border.

Rev.—Stag standing r.

←R. 20·5 mm. Wt. 7·90 grm. (121·9 grs.).
[Pl. VI. 1.]

² Lots 8, 9, 110, 114, 120, 121, 125, 126, 133, 134, 138-140, 144-154, 156, 159, 161-171, 198, 200-204, 291-295, 340, 352, 451, 473, 547, 559, 560, 570-572, 581, 586, 616-618, 635-639, 648-654, 659, 660, 662-669, 742, 756, 757, 810, 811, 1103, 1169, 1211, 1236-1239, 1266, 1288.

³ Lots 8, 30, 33, 36, 37, 52, 67, 71, 74, 105, 144, 151, 161, 165, 167, 655, 845, 1782, 2151, 2231, 3668, 3902, 4229, 4231, 4236, 4251, 4254, 4255, 4262, 4273, 4276, 4335, 4369, 4645, 4678, 4679, 4699, 4707, 4712-4714, 4716, 4720.

⁴ Lots 1358, 2322, 3060.

⁵ See my *Hist. Gk. Coins*, No. 97, and *Hist. Rom. Coins*, No. 71.

A good specimen of the early transitional issues of this mint, generally similar to *B.M.C., Italy*, p. 337, No. 17. This class seems to have been issued but for a short time, probably not long after 500 B.C. Afterwards the cable border disappears, and the inscription is placed on the side with the stag as well as on the other. Eventually the inscription is limited to the side with the stag. This new coin and the one previously in the British Museum necessitate a slight modification in Macdonald's interesting argument (*Coin Types*, p. 133), since it cannot be said that, when the stag appears as an independent type, "from the first moment of its appearance the ethnic is seen beside it."

SICILY: SEGESTA.

2. *Obv.*—Hound r.; above, small female head r.; border of dots.

Rev.—ΣΜΕΕΓΓΕΑΞ Τ (?) Head of nymph r., wearing necklace; concave field.

↖ *R.* 23 mm. Wt. 8.53 grm. (131.7 grs.).
[Pl. VI. 2.]

This didrachm is only remarkable for the insertion of four small letters between the first five letters of the inscription. I had read them so as to complete the inscription ΣΕΓΕΣΤΑΙΟΝ, but they are very obscure, and after continued examination I seem to see ΜΕΙΑ, which would, with the main inscription, make Σεγεςταζ(ιβ)εμ(ι).

SARMATIA: OLBIA.

3. *Obv.*—Female head l., the hair rolled and confined by a wreath, of which two leaves only are visible at the top.

Rev.—οΑ Dolphin l.; concave field.

↗ *N.* 12 mm. Wt. 2.11 grm. (32.5 grs.).
[Pl. VI. 3.]

A hemidrachm, of careless style, similar to the coin illustrated by Pick (*Münzen Nord-Griechenlands*, I. i. Taf. ix. 18), apparently of the third-second century B.C.

4. *Obv.*—Female head facing, with long flowing hair, wearing necklace.

Rev.—Eagle, with wings spread, head r., standing to front on dolphin l.; below, OABIO; in field r., E; concave field.

↑ R. 19 mm. Wt. 6.12 grm. (94.5 grs.).
[Pl. VI. 4.] For a larger denomination, with the head in profile, and the same monogram, see Pick, *op. cit.*, Taf. ix. 2.

MOESIA: CALLATIS.

5. *Obv.*—Head of Artemis r., hair in chignon; bow and quiver behind neck.

Rev.—Mounted archer on prancing horse, shooting to l.; below, KAA; above, on r., ATAPA.

← R. 18 mm. Wt. 5.73 grm. (88.5 grs.).
[Pl. VI. 5.]

If this coin, which is of good fourth-century style, and was purchased from a Bulgarian dealer, is rightly attributed to Callatis, it is earlier than any other known issues of that place. It is, indeed, earlier than any known historical record of the city, which is first mentioned in connexion with a war against Lysimachus in 313 B.C., in which it played the leading part.⁶ It must have been an important place for some time earlier, and there is therefore nothing antecedently improbable in the attribution to it of a coinage in the fourth century.

⁶ Pick, *Münzen Nord-Griechenlands*, I. i. p. 85.

In weight and style the piece corresponds very well with the contemporary coinage of Istrus.⁷

So much I had written when, by inquiry of Professor Behrendt Pick and Dr. Imhoof-Blumer, I was reminded of the fact that this identical coin has already been published by the latter scholar.⁸ Dr. Imhoof considers the attribution to Callatis probable, and notes that, by the dress of the archer, he is not a Greek, but rather a northern, perhaps Scythian, warrior. As to the reading of the second part of the inscription, Dr. Imhoof wavers between ΑΤΑΙΑ and ΑΤΑΚΑ, the latter suggesting the Scythian name 'Αρακάμ (Müller, *F. H. G.*, iv. 72 = Prisci Panitæ fr. 1). The reading ΑΤΑΠΑ seems to me more probable than either of the others proposed. If it is not, as Dr. Imhoof thinks it may be, a blundered continuation of the first part of the inscription (for ΚΑΛΛΑΤΙΑΝΩΝ), we may perhaps see in it the name of a local ruler rather than a magistrate of the city.

THRACE: MOSTIS.

6. *Obv.*—Young male head r.

Rev.—[ΒΑΣ]ΙΛΕΩ[Σ] on l. upwards, [ΜΟ]ΣΤΙΔΙΟΣ on r. upwards. Caduceus; concave field.


↑ Æ. 11·5 mm. Wt. 1·90 grm. (29·3 grs.).
[Pl. VI. 6.]


The head on the obverse may be that of Hermes; there are traces behind it of an object, which may have been a petasos, slung at the back.

⁷ The maximum weight of 7·02 grm. is rarely reached even by the earliest coins of Istrus (see Pick, *op. cit.*, p. 159 ff.).

⁸ *Zur griech. u. röm. Münzkunde*, p. 288, Taf. x. 22 = *Rev. Suisse*, xiv. (1908), p. 268, Pl. vi. 22. Owing to a misunderstanding, the coin is there described as being in the Gotha cabinet.

RHOOMETALCES I.

7. *Obv.*—Head of Rhoemetalces r., diademed; in front, ; border of dots.

Rev.—BYZANTI[A] Head of Augustus r., bare; in front, ; border of dots.

↑Æ. 18.5 mm. Wt. 3.20 grm. (49.4 grs.).
[Pl. VI. 7.]

A good specimen of the interesting Βυζαντία (δραχμὰ) described by Imhoof-Blumer, *Journ. Intern.*, i. p. 17, No. 11. The monograms are for Ba. Ποιμη(τάλακας) and Καίσαρ respectively.

CORINTH.

8. *Obv.*—IMPLAVR VERVAVG Bust of Verus r., bare-headed, wearing paludamentum and cuirass; border of dots.

Rev.—CLICOR Chimaera springing r.; border of dots.

←Æ. 27 mm. Wt. 9.96 grm. (153.7 grs.).
[Pl. VI. 8.]

ACHAEA: BURA.

9. *Obv.*—ΑΟΥCΕΠ ΤΙ - - CΕΟΥΗ - - Bust of Septimius Severus r. laur., wearing paludamentum and cuirass; border of dots.

Rev.—ΒΟΥΡΕΑ ΤΩΝ Male figure (Dionysos?) seated to front on throne with arched back; he wears himation, leaving his body nude to the waist, with the end of the garment appearing over l. shoulder; in his l. arm he holds a sceptre, his r. hand rests on his knee; border of dots.

↘Æ. 23.5 mm. Wt. 6.54 grm. (101.0 grs.).
[Pl. VI. 9.]

A similar, but not so well-preserved, coin was described by Macdonald in the Hunter Catalogue (ii. p. 125, No. 1,

Pl. xxxvii. 22). The present specimen enables one to correct the reading of the inscription, and to identify the figure as not Demeter, but a male deity; the way in which the himation is worn is enough to prove this. The effeminate appearance of the figure suggests Dionysos, of whom there was a temple at Bura (Paus., vii. 25. 5).

The arched back to the throne is unusual, yet I cannot think that it is meant for the arch of a niche behind the seat.

CRETE: OLUS.

10. *Obv.*—Head of Artemis r.

Rev.—ΝΟΛΟ Male figure seated l. (Zeus?), r. hand extended holding eagle (?), l. resting on sceptre; concave field.

←Æ. 13.5 mm. Wt. 1.41 grm. (21.7 grs.).
[Pl. VI. 10.]

Apparently a degenerate version of the coin described by Svoronos, *Num. de la Crète*, p. 250, No. 6, Pl. xxii. 27.

IONIAN ELECTRUM.

11. *Obv.*—Half figure to r. of deity with curled wings, long hair, and pointed beard, wearing flat head-dress; his hands are extended on either side.

Rev.—Oblong between two squares incuse, each filled with irregular markings.

↑Electrum (pale), 15 mm. Wt. 7.05 grm. (108.8 grs.). [Pl. VI. 11.]

The specific gravity of this coin is approximately 14.4, which, according to Head's curve,⁹ represents 59 per cent. of pure gold.

⁹ *Num. Chron.*, 1887, p. 308.

The coin is a half-stater of the "Phoenician" standard. The type is puzzling. At first sight it suggests Ahuramazda, or rather (since the coin can hardly be later than the seventh century) his Assyrian prototype Ashur. The wings are treated in the conventional Greek way; but the headdress and hair (or wig) have a distinctly Oriental air.

LYCIA.

12. *Obv.*—Lion standing r., with head reverted; border of dots.

Rev.—Fore-part of bull l. (l. leg only visible) in dotted square, within incuse square.

↓ *R.* 23 mm. Wt. 9.00 grm. (138.9 grs.).
Double struck on rev. [Pl. VI. 12.]

13. *Obv.*—Boar to l., head lowered; on its haunch, triskeles turning to r.

Rev.—Triskeles turning to l., in dotted square within incuse square.

↑ *R.* 16 mm. Wt. 2.75 grm. (42.5 grs.).
[Pl. VI. 13.]

A variety (owing to the symbol on the animal's haunch) of the already known tetrobol (Babelon, *Traité*, Pl. xxii. 5 or *B. M. C., Lycia*, p. 7, No. 36).

14. *Obv.*—Crab.

Rev.—Triskeles turning to r., in incuse square.

↑ *R.* 12.5 mm. Wt. 0.64 grm. (9.8 grs.).
[Pl. VI. 14.]

This belongs to the same period as the two preceding, *i.e.* about 500–400 B.C. A crab occurs as the type of a Lycian stater, *B. M. C., Lycia*, Pl. ii. 5.

15. *Obv.*—Winged female figure, wearing long chiton, advancing to r., both hands extended.

Rev.—Griffon, with curled wings, standing l., r. fore-foot raised; in dotted (?) square within incuse square.

↓ R. 7 mm. Wt. 0.30 grm. (4.6 grs.).
[Pl. VI. 15.]

Larger denominations with the same types have been published (Babelon, *Traité*, Pl. xxv. 7, 9, 10, 12). M. Babelon places them beside the rather earlier Cilician coins¹⁰ with a similar figure on the obverse, without, however, vouching for the attribution. He dates them about 485–465. The British Museum possesses three coins of the series, the two larger weighing 2.83 grm. (43.7 grs.) and 1.26 grm. (19.5 grs.), the third being the little piece just described. The first was the Montagu specimen¹¹; the second and third, however, were both acquired from dealers with lots of *Lycian* coins. Before the acquisition of these, I had already, on grounds of style and fabric, moved the Montagu specimen to the *Lycian* series.

16. *Obv.*—Winged human-headed bull walking r.

Rev.—ΚΟΓ Triskeles turning to r.; all in dotted square within incuse square.

↗ R. 9 mm. Wt. 0.52 grm. (8.1 grs.).
[Pl. VI. 16.]

The stater and triobol of these types are already known (Babelon, *op. cit.*, Nos. 278, 278 bis).

¹⁰ In *B. M. C., Lycaonia, &c.*, p. cxviii, I showed reasons against the traditional attribution of these coins to Mallus; Imhoof-Blumer at the same time (*Kleinas. Münzen.*, ii. p. 485) suggested Aphrodisias in Cilicia, an attribution which may be said to hold the field.

¹¹ Sale Catal., i. lot 646.

17. *Obv.*—Bird (dove?), standing l., between two olive-branches; border of dots.

Rev.—ΚΟ Γ Λ Ε Triskeles turning to r.; all in dotted square, within incuse square.

↗ *R.* 19 mm. Wt. 3.06 grm. (47.3 grs.).
[Pl. VII. 1.]

18. *Obv.*—Bull kneeling l.; above, small triskeles turning to l.

Rev.—ΚΟ Γ Λ Ε (*sic*). Triskeles turning to l.; all in dotted square within incuse square.

↘ *R.* 14.5 mm. Wt. 2.95 grm. (45.6 grs.).
[Pl. VII. 2.]

The omission of the P in the inscription is, of course, a mere slip on the part of the engraver. For the obverse type (without the symbol), cp. Babelon, *Traité*, Pl. xcvi.

13. Our coin is, however, ruder in style, and may belong to the earlier series of Kuprili's coins.

19. *Obv.*—Head of Athena r. in crested Corinthian helmet.

Rev.—F Triskeles turning to r.; in field, diskeles turning to r.; all in dotted square within incuse square.

↖ *R.* 13 mm. Wt. 2.53 grm. (39.0 grs.).
[Pl. VII. 3.]

20. *Obv.*—Bearded head r., wearing crested Athenian helmet decorated with olive-leaves.

Rev.—⦿ ↑ ↓ Fore-part of winged human-headed bull r.; all in incuse square.

↑ *R.* 12.5 mm. Wt. 2.07 grm. (32.0 grs.).
[Pl. VII. 4.]

Both these coins are at present placed with those of Vakhssärä. No. 19 shows, like many of that series, the diskeles symbol in the field. As to No. 20, it is possible

that the obliterated letter on the reverse may be a retrograde P and not F, in which case we should have a coin of Khārōi or Khārīga.

21. *Obv.*—Head of Athena r., wearing crested helmet adorned with three olive-leaves.

Rev.—FA √ √ Two lions seated, opposed, their heads facing, each with one fore-paw raised; between them, ✠; all in dotted circle within incuse circle.

→R. 16 mm. Wt. 2.54 grm. (39.2 grs.).
[Pl. VII. 5.]

This coin combines the name *Vakhs* (which appears to be an abbreviation of *Vakhssābā*, found on a triobol with different types, Babelon, *Traité*, Pl. cii. Fig. 7), with the regular types of the city of Tlos. Whether the name is a "dialectal variation" of *Vakhssārā*, which is found on a number of other coins of about the same time (Babelon, Pl. ci. 18—cii. 6), may be doubted.

22. *Obv.*—Head of Athena l. in crested Athenian helmet decorated with olive-leaves; border of dots.

Rev.—9↑ Head of bearded Heracles r. in lion-skin; behind, club downwards; all in dotted square within incuse square.

→R. 15.5 mm. Wt. 2.07 grm. (32.0 grs.).
[Pl. VII. 6.]

Apparently a new denomination of the coinage of Ärbina.

PHELLUS.

23. *Obv.*—ΑΥΤΚΑΙΜΑΝΤΓΟΡΔΙ - - Bust of Gordian III r. laur., wearing paludamentum and cuirass.

Rev.—ΦΕΛΛΕ ΙΤΩΝ (in unusually large letters). Female figure (Aphrodite?), wearing chiton

and himation and veil, standing r., holding apple in her l., and pointing to it with her r.

↑Æ. 28.5 mm. Wt. 14.09 grm. (217.4 grs.).
[Pl. VII. 7.] Similar to the coin noted in
B. M. C., Lycia, p. lxi.

TELMESSUS.

24. *Obv.*—Head of Alexander the Great r., with ram's horn, as on coins of Lysimachus.

Rev.—Lion walking l., r. fore-leg raised; in exergue,
[T]ΕΛΕΜΗΣΣΕ[ΩΝ]; above, ΠΤ

↑Æ. 16 mm. Wt. 3.71 grm. (57.3 grs.).
[Pl. VII. 8.]

The head of Alexander the Great which appears on this interesting coin may allude to his acquisition of the city by treaty at the outset of his Persian expedition. It is clearly copied from the type on coins of Lysimachus. On the reverse of the coin appears a monogram which may be resolved into ΠΤ. Now, an inscription¹² of Telmessus of the year 241–0 B.C. records that at some time one Ptolemy son of Lysimachus had received the city of Telmessus from Ptolemy II of Egypt, whether as a gift or otherwise is not certain. Mahaffy suggests that this Ptolemy was the eldest son of Lysimachus of Thrace and Arsinoë Philadelphus.¹³ If so, what more natural than that he should have borrowed a type from his father's coins? Even the lion of the reverse may have been suggested by the type of the bronze coins of Lysimachus, although its attitude is different. I would

¹² V. Bérard in *B. C. H.*, xiv. 162 f.; Mahaffy in Grenfell, *Revenue Laws of Ptolemy Philadelphus*, pp. lii. f.

¹³ This is declared impossible by Bérard, on account of the absence of the title *Βασιλέως* before the name of Lysimachus.

therefore attribute this coin to Ptolemy son of Lysimachus, as governor of Telmessus about 241 B.C.

PISIDIA : COMAMA.

25. *Obv.*—PSEPT GETACAES Bust of Geta r., bareheaded, wearing paludamentum ; border of dots.

Rev.—COLAVGCO MAMENOR Goddess, wearing kalathos, and long veil which she holds apart with her hands, moving to l. ; border of dots.

↑Æ. 19.5 mm. Wt. 4.22 grm. (65.1 grs.).
[Pl. VII. 9.]

A fine specimen, presented by Sir Hermann Weber, of a type hitherto represented in the collection by a poorly preserved coin of Antoninus Pius (*B. M. C., Lycia, &c.*, p. 212, No. 1).

CYPRUS : MENELAUS OF SALAMIS.

26. *Obv.*—Head of Aphrodite l., wearing turreted crown ; behind, downwards, MEN

Rev.—Head of goddess l., wearing crown with semi-circular plates, as on coins of Pnytagoras ; behind, ‡

↑A. 11 mm. Wt. 2.75 grm. (42.5 grs.).
[Pl. VII. 10.]

From the same dies as Col. Massy's specimen (*B. M. C., Cyprus*, p. cxiii. Pl. xxiv. 23).

SYRIA : ANTIOCHUS IV.

27. *Obv.*—Head of Antiochus IV r., diademed ; border of dots.

Rev.—ΒΑΣΙΛΕΩΣ | ANTIOXOY on r. downwards, ΘΕΟΥ | ΕΠΙΦΑΝΟΥΣ on l. downwards, ΝΙΚΗΦΟΡΟΥ in exergue. Zeus seated l., holding Nike in r., resting with l. on sceptre.

↑A. 21.5 mm. Wt. 8.57 grm. (132.3 grs.).
[Pl. VII. 11.]

Differing from the Paris specimen (Babelon, *Rois de Syrie*, Pl. xii. 9) in the border of dots, instead of fillet-border. These two specimens seem to be the only ones that are known.

ANTIOCHIA AD ORONTEM.

28. *Obv.*—ΣΕΒΑΣΤΟΥ Ἰ - - - Head of Augustus r., bare ; in front, IB upwards ; border of dots (?).

Rev.—ΚΑΙΣΑΡΟΣ on r. downwards, [Θ]ΕΟΥΥΙΟΥ on l. downwards. Zeus seated l., holding Nike on r., resting l. on sceptre ; in field l., \aleph and \aleph ; in exergue, ΦΕ

↑ \mathcal{R} . 27.5 mm. Wt. 13.86 grm. (213.9 grs.).
[Pl. VII. 12.]

This rare tetradrachm, unfortunately not well preserved, still seems to show more details than the specimen described by Pick in *Zeitschr. f. Num.*, xiv. p. 310, the date IB and the letters in the exergue being new. The former confirms his dating of the coin, which he connects with the series mentioning the twelfth and thirteenth consulships, but bearing the ordinary type of the Tyche of Antioch.

PARTHIA: "UNKNOWN KING."

29. *Obv.*—Bust of king l., with short beard, diadem, spiral necklace, and cuirass with \ast on breast ; border of dots.

Rev.—ΒΑΣΙΛΕΩΣ above, Μ ΕΓΓΛΟΥ | Α ΡΣΑΚΟΥ r. downwards, [ΦΙΛ]ΟΠΑΤΟΡΟΣ | [Ε]ΥΕΡΓΕΤΟΥΣ below, ΕΠΙΦΑΝΟΥΣ | ΦΙΛΕΛΛΗΝΟΣ l. downwards ; Arsaces seated r. on throne, holding bow ; in field r., HP

↑ \mathcal{R} . 30 mm. Wt. 14.89 grm. (229.8 grs.).
[Pl. VII. 13.]

↑ \mathcal{R} . 30 mm. Wt. 14.26 grm. (220.0 grs.).

These two specimens of this rare tetradrachm, which was formerly unrepresented in the British Museum (see Wroth, *B. M. C., Parthia*, p. 58), are from the same dies.

EGYPT.

30. *Obv.*—ΘΕΩΝ Busts of Ptolemy I and Berenice I r. jugate; border of dots.

Rev.—ΑΔΕΛΦΩΝ Busts of Ptolemy II and Arsinoë II r. jugate; border of dots.

↑ *N.* 13 mm. Wt. 3·45 grm. (53·2 grs.).
[Pl. VII. 14.]

Of this drachm one other specimen only, at Paris, seems to be known (Svoronos, *Νομ. Προλ.*, p. 90, No. 606).

MAURETANIA: PTOLEMAEUS.

31. *Obv.*—PTOLEMAEVS REX Bust r., undraped, diademed.

Rev.—ΠΙΕΤ ΑΤΙ Altar, on front of which R A and wreath; below, remains of date, V (?) ; border of dots.

↓ *N.* 15 mm. Wt. 3·11 grm. (48·0 grs.).
[Pl. VII. 15.]

This is the coin mentioned in Mr. Head's *Historia Numorum*², p. 889. Unfortunately, only a portion of the date numeral is on the flan; that portion appears to be a v, in which case the complete date was probably xv.

G. F. HILL.

IX.

THE EDWINSTOWE FIND OF ROMAN COINS.

THE circumstances of a find of denarii on Kingsland Farm, Edwinstowe, Nottinghamshire, have been described by Mr. E. Wilmshurst in Spink's Circular for March, 1911; it contained 367 Roman denarii ranging from Nero (54-68 A.D.) to the second consulship of Commodus (179-181 A.D.),¹ also one provincial denarius of the Emperor Trajan, struck in his second consulship (98-100 A.D.) for Lycia, and one contemporary forgery cast from a denarius of Trajan's sixth consulship (112-117 A.D.). The following list gives the number of coins of each emperor found in the hoard:—

Nero (<i>Aug.</i> 54-68 A.D.) . . .	1
Galba (<i>Caes.</i> 68-69 A.D.) . . .	2
Otho (<i>Aug.</i> 69 A.D.) . . .	1
Vespasian (<i>Aug.</i> 69-79 A.D.) . . .	34 (including 4 "Consecration" coins)
Titus (<i>Aug.</i> 79-81 A.D.) . . .	9
Domitian (<i>Aug.</i> 81-96 A.D.) . . .	26
Nerva (<i>Aug.</i> 96-98 A.D.) . . .	7
Trajan (<i>Aug.</i> 98-117 A.D.) . . .	95
Hadrian (<i>Aug.</i> 117-138 A.D.) . . .	94
Sabina (<i>Aug.</i> 128-136 A.D.) . . .	5
Lucius Aelius (<i>Adopted</i> 136-138 A.D.)	2

¹ Here and throughout this paper the dates assigned to consulships are taken from Goyau's *Chronologie de l'Empire Romain*.

Antoninus Pius (<i>Aug.</i> 138–161 A.D.)	36 (including 4 “Consecration” coins)
Faustina Senior (<i>Aug.</i> 138–141 A.D.)	14 (including 12 “Consecration” coins)
Marcus Aurelius (<i>Aug.</i> 161–180 A.D.)	22
Faustina Junior (<i>Aug.</i> 147–176 A.D.)	9
Lucius Verus (<i>Aug.</i> 161–169 A.D.)	2
Annia Lucilla (<i>Wife</i> 164–169 A.D.)	6
Commodus (cos I.–II. = 177–181 A.D.)	2
Lycian denarius of Trajan (cos II. = 98–100 A.D.)	1
Forgery of Roman denarius of Trajan (cos VI. = 112–117 A.D.)	1
Total	369

The presence in the hoard of a Lycian coin, brought probably by a soldier who had seen service in Asia Minor, and of a contemporary forgery made by casting from a genuine denarius is interesting, also the absence of any legionary coins of Marcus Antonius (see *B. M. Cat. of Roman Republican Coins*, vol. ii. p. 527, note 3).

The condition of the coins down to the reign of Titus is poor, they are much worn by circulation; those of Domitian and Nerva are similar but rather less worn; from Trajan to Antoninus the coins are mostly in good condition, and a few specimens are very fine; from Marcus Aurelius to the end the coins are mostly very fine, and show but slight traces of wear from circulation.

The hoard was contained in a globular jug of light buff ware with curved handle set on shoulder and lip; the lower side of the belly where it curves down to the small base is ornamented with horizontal bands of red paint. The narrow neck and handle were perhaps broken off before the coins were deposited in the jug. It was found broken, and only small fragments have survived.

DESCRIPTION OF COINS.

NERO. 54-68 A.D.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Méd. Imp.</i> , 2nd edition.
1	NERO CAESAR AVGVSTVS	IVPPITER CVSTOS	I. p. 287, 119.
2	IMP SER GALBA CAESAR AVG	GALBA. 68-69 A.D. DIVA AVGVSTA	I. p. 323, 55.
3	IMP SER GALBA AVG	SPQR OB C S	Cf. I. p. 338, 286 and 287 (in no. 287 metal and value misprinted?).
4	IMP M OTHO CAESAR AVG TR P	OTHO. 69 A.D. SECVRITAS P R	I. p. 353, 17.
5	IMP CAES VESP AVG P M	VESPASIAN. 69-79 A.D. TRIB. POT. I. AVGVR TRI POT	I. p. 371, 43.
6	" "	TRI POT (Vesta, seated l.)	I. p. 411, 561. ²

² See *Num. Chron.*, 1910, p. 16, No. 14.

VESPASIAN. 69-79 A.D.—continued.

Cos II.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Mét.</i> <i>Imp.</i> , 2nd edition.
7, 8	IMP CAESAR VESPASIANVS AVG (Head r., laureate.)	COS ITER TR POT (Pax, seated l., holding branch and corn-ears.)	Omitted.
9	IMP CAES VESP AVG P M COS IIII	Cos IV. TRI POT (Vesta, seated l.)	I. p. 411, 568.
10, 11	IMP CAESAR VESPASIANVS AVG	Cos V. PON MAX TR P COS V (Winged caduceus.)	I. p. 395, 302.
12	IMP CAESAR VESP AVG	COS V (Two laurels.)	I. p. 376, 110.
13, 14	IMP CAESAR VESPASIANVS AVG	Cos VI. PON MAX TR P COS VI (Victory to l. on prow.)	I. p. 395, 368.
15-17	"	seated l., holding branch.) " (Female figure,	I. p. 395, 366.
18	IMP CAESAR VESPASIANVS AVG	Cos VII. COS VII (Eagle on cippus.)	I. p. 377, 120.
19	IMP CAESAR VESPASIANVS AVG	Cos VIII. COS VIII (Mars to l., holding trophy and spear.)	I. p. 377, 125.

IMP. XIX.

CAESAR VESPASIANVS AVG		IMP XIX (Sow and litter.)	I. p. 383, 213.
UNDATED.			
21	CAESAR VESPASIANVS AVG	ANNONA AVG	I. p. 370, 28.
22, 23	IMP CAESAR VESPASIANVS AVG	IOVIS CVSTOS	I. p. 384, 222.
24	" (Bust to l.)	"	I. p. 384, 223.
25	CAESAR IMP VESPASIANVS AVG (Bust to r.)	"	Omitted.
26	IMP CAESAR VESPASIANVS AVG	IVDAEA	I. p. 384, 229.
27	IMP CAES VESP AVG P M	PON MAX	I. p. 394, 358.
28-31	IMP CAES VESP AVG CENS	PONTIF MAXIM (Vespasian, seated r.)	Omitted (cf. I. p. 397, 387).
32	IMP CAES VESP AVG CEN	SALVS AVG	I. p. 401, 431.
33, 34	Uncertain.		
CONSECRATION COINS OF VESPASIAN: OB. 79 A.D.			
35	DIVS AVGVSTVS VESPASIANVS	EX S C (Victory erecting trophy.)	I. p. 378, 144.
36	"	" (Funeral column between two laurels.)	I. p. 378, 149.
37, 38	"	S C (Shield supported by two capricorns.)	I. p. 406, 497.

TITUS. 79-81 A.D.

Tm. Por. I.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Méd. Imp.</i> , 2nd edition.
39	T CAES IMP VESP CENS	PONTIF TRI POT (Titus, seated r.)	I. p. 443, 169.
		Cos IV.	
40	T CAESAR IMP VESPASIAN	PONTIF TR P COS IIII (Female figure, seated l., holding branch.)	I. p. 443, 162.
		Cos VII.	
41	IMP TITVS CAES VESPASIAN AVG P M	TR P VIII IMP XIII COS VII P P (Quadrige to l.)	I. p. 452, 278.
		Cos VIII.	
42	IMP TITVS CAES VESPASIAN AVG P M	TR P IX IMP XV COS VIII P P (to l. tusked.)	I. p. 454, 303.
43	" "	" "and captives."	I. p. 454, 306.
44	" "	" "with dolphin."	I. p. 454, 309.
45	" "	" "chair, with wreath."	I. p. 455, 318.
46	" "	" "with dolphin."	I. p. 455, 321 (COS IIII misprinted for COS VIII).

DOMITIAN. 81-96 A.D.—*continued*.
COS XIV.—*continued*.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Méd.</i> <i>Imp.</i> , 2nd edition.
57	IMP CAES DOMIT AVG GERM P M TR P VII	IMP XIII COS XIII CENS P P P (Pallas to r., fighting, on ship.)	I. p. 491, 236.
58	IMP CAES DOMIT AVG GERM P M TR P VIII	IMP XVI COS XIII CENS P P P (Pallas to r., fighting, on ship.)	Omitted.
59	" "	IMP XVII COS XIII CENS P P P (Type as 56.)	I. p. 492, 245.
60	" "	" " " (Pallas, fighting to r.)	I. p. 492, 246.
61	" "	IMP XIX COS XIII CENS P P P (Type as 55.)	I. p. 493, 250.
62	IMP CAES DOMIT AVG GERM P M TR P VIII	IMP XXI COS XIII CENS P P P (Type as 56.)	I. p. 493, 256.
COS XV.			
63, 64	IMP CAES DOMIT AVG GERM P M TR P VIII	IMP XXI COS XV CENS P P P (Type as 60.)	I. p. 493, 261.
65	IMP CAES DOMIT AVG GERM P M TR P X	" " " (Type as 56.)	I. p. 494, 264.
66	" "	" " " (Type as 60.)	I. p. 494, 265.
67	" "	" " " (Type as 57.)	I. p. 494, 266.

NERVA. 96-98 A.D.—*continued*.

TRI. POT. II, Cos IV, IMP. II.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Méd.</i> <i>Imp.</i> , 2nd edition.
80	IMP NERVA CAES AVG GERM P M TR P II	IMP II COS IIII P P (Libertas to I.)	II. p. 8, 89.
TRAJAN. 98-117 A.D.			
Cos II.			
81	IMP CAES NERVA TRAIAN AVG GERM	P M TR P COS II P P (Fortuna or Abundantia (?), seated I.)	II. p. 40, 206.
82	"	" (Victory, seated I.)	II. p. 41, 213.
83	"	PONT MAX TR POT COS II (Vesta, seated I.)	II. p. 48, 288.
84	"	" standing I.)	II. p. 48, 292.
85, 86	"	" or Abundantia (?), seated I.)	II. p. 49, 301.
87	IMP CAES NERVA TRAIAN AVG GERM P M	TR P COS II P P (Fortuna or Abundantia (?), seated I.)	Omitted (cf. II. p. 79, 595).
Cos III.			
88	IMP CAES NERVA TRAIAN AVG GERM	P M TR P COS IIII P P (Pax, standing I.)	II. p. 42, 232.
89	"	" (Vesta, seated I.)	II. p. 42, 239.

Cos IV.

	IMP P M TR P	NERVA	TRAIAN	AVG	P M TR P COS IIII P P (on altar.)	(Hercules, facing,	II. p. 43, 234.
92	"	"	"	"	head to l.)	(Victory, facing,	II. p. 43, 240.
93	"	"	"	"	on prow.)	(Victory, to r.,	II. p. 43, 241.
94	"	"	"	"	writing on shield.)	(Victory, to r.,	II. p. 44, 247.

Cos V.

	IMP P M TR P	TRAIANO	AVG	GER	DAC	COS V P P S P Q R OPTIMO PRINC (Mars to l.)	II. p. 25, 63.
95, 96	"	"	"	"	"	(Rome, standing l.)	II. p. 25, 63.
97	"	"	"	"	"	(Rome, seated l.)	II. p. 26, 69.
98-100	"	"	"	"	"	(Victory, standing l.)	II. p. 26, 74.
101-103	"	"	"	"	"	(Victory, walking l., on shields.) ^s	II. p. 26, 77.
109-111	"	"	"	"	"	(Pax, standing l., with caduceus and cornucopiae.)	II. p. 27, 81.
112, 113	"	"	"	"	"		

^s See *Nun. Chron.*, 1910, p. 21, Nos. 50, 51.

TRAJAN. 98-117 A.D.—*continued*.Cos V.—*continued*.

No.	Obverse.		Reverse.		Reference to Cohen, <i>Méd. Imp.</i> , 2nd edition.
	IMP	TRAJANO P M TR P	AVG	GER DAC	
114-119				COS V P P S P Q R OPTIMO PRINC (Aequitas, standing l.)	II. p. 27, 85. ⁴
120	"	"	"	" (Aequitas, seated l.)	II. p. 27, 86.
121	"	"	"	" (Fortuna, standing l.)	II. p. 27, 87.
122-124	"	"	"	" (Arabia, standing l.)	II. p. 27, 89.
125	"	"	"	" (Trophy, with one round and one oval shield, etc.)	II. p. 28, 98.
126, 127	"	"	"	" (Trophy, with three oval shields, etc.)	II. p. 28, 99.
128	"	"	"	" (Trophy, with one round and two hexagonal shields, etc.)	II. p. 28, 100.
129	"	"	"	" (Var. of preceding with two scythes at foot of trophy.)	Omitted.
	"	"	"	AET "AVG in field.	II. p. 18, 3.

132, 133	"	"	"	DAC "CAP in exergue. (Dacia, seated l., weeping.)	II. p. 31, 120.
134	"	"	"	VESTA in exergue.	II. p. 85, 644.
135	IMP TRAIANO AVG GER DAC P M TR P COS V P P	"	"	S P Q R OPTIMO PRINCIPI (Genius to l., beside altar.)	II. p. 59, 894.
136, 137	"	"	"	(Felicitas ⁵ to l., holding caduceus and cornucopieae.)	II. p. 60, 403.
138 (pierced)	"	"	"	(Felicitas ⁵ to l., beside altar.)	II. p. 60, 412.
139	"	"	"	(Pax, seated l., Dacian suppliant at feet.)	II. p. 61, 417.
140	"	"	"	(Pax, seated l., Dacian suppliant at feet.)	II. p. 61, 418.
141	"	"	"	(Spes to l.)	II. p. 64, 457.
142	"	"	"	(Aequitas, standing l.)	II. p. 65, 462, var.
143	"	"	"	(Dacia, seated r., on shield.)	II. p. 72, 529.
143	"	"	"	(Dacia, seated at foot of trophy.)	II. p. 72, 537.

⁵ *Num. Chron.*, 1910, p. 21, No. 53.⁶ See Ghecohi, *I Tipi Monetarii*, Pl. xii.

TRAJAN. 98-117 A.D.—*continued*.

Cos VI.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Méd. Imp.</i> , 2nd edition.
144	IMP TRAIANVS AVG GER DAC P M TR P COS VI P P	DIVS PATER TRAIAN	II. p. 38, 140.
145	IMP CAES NER TRAIAN OPTIM AVG GER DAC	PARTHICO P M TR P COS VI P P S P Q R (Virtus to r.)	II. p. 39, 193.
146, 147	" " "	FORT" RED in exerguo.	II. p. 34, 150.
148-150	" " "	PRO "VID in field.	II. p. 50, 313.
151	IMP CAES NER TRAIANO OP- TIMO AVG GER DAC (Bust r., laureate draped.)	P M TR P COS VI P P S P Q R (Jupiter protecting Trajan.)	II. p. 46, 269, var.
152	" " "	(Mars to r.)	II. p. 46, 270.
153	IMP CAES NER TRAIAN OPTIM AVG GER DAC PARTHICO	(Mars to r.)	II. p. 46, 271.
154, 155	IMP CAES NER TRAIANO OP- TIMO AVG GER DAC	(Virtus to r.)	II. p. 46, 273.
	" " "	(Genius to l.)	II. p. 46, 276.

159, 160	Inscription as 153.		"	"	II. p. 46, 277.
161-163	Inscription as 151.		"	"	II. p. 46, 278.
164	"		"	"	II. p. 34, 154.
	Inscription as 153.		"	"	II. p. 50, 317.
165	IMP TRAIANO AVG GER DAC P M TR P COS VI P P		PRO VIV in field.	"	II. p. 57, 372.
166, 167	"	"	"	"	II. p. 59, 398.
168	"	"	"	"	Omitted (cf. II. p. 66, 484.)
169	"	"	"	"	II. p. 77, 577.
170	"	"	"	"	II. p. 18, 9.
171, 172	"	"	"	"	II. p. 20, 26. ^a
M 173-175	"	"	"	"	II. p. 26, 648.

^a See *Num. Chron.*, 1910, p. 23, Nos. 62, 63.

HADRIAN. 117-138 A.D.

Cos I.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Méd.</i> <i>imp.</i> , 2nd edition.
176, 177	IMP CAES TRAIAN HADRIAN OPT AVG GER DAC	PARTHIC DIVI TRAIAN AVG F P M TR P COS P P CONCORD in exergue.	II. p. 125, 250.
178, 179	IMP CAES TRAIAN HADRIANO AVG DIVI TRA (Bust r., draped and wearing cuirass.)	PARTH F DIVI NER P M TR P COS CONCORD in exergue.	II. p. 125, 248, var.
180, 181	" " "	FORT ^{II} RED in exergue.	II. p. 169, 749.7
182	" " "	PAX in exergue.	II. p. 190, 1011.

Cos II.

183, 184	IMP CAESAR TRAIAN HADRI- ANVS AVG	P M TR P COS II CONCORD in exergue.	II. p. 125, 252.
185	" " "	" " FORT RED in exergue.	II. p. 169, 745.
186	" " "	" " IVSTITIA in exergue.	II. p. 180, 877.
187	" " "	" " PAX in exergue.	II. p. 190, 1015.
188	" " "	" " PIETAS in field.	II. p. 191, 1027.
189	" " " (Bust r., wearing cuirass.)	" " PIETAS in field.	II. p. 191, 1027, var.

	COS DES. III.					
	IMP ANVS AVG	CAESAR TRAIAN	HADRI- ANVS	P M TR P field.	COS DES III FEL AVG in field.	
190						IL. p. 158, 598.
191	"	"	"	"	VOT PVB in field.	IL. p. 229, 1476.
COS III.						
192	HADRIANVS AVG (Head r., bare.)	COS III	P P	AEGYPTOS		IL. p. 114, 99.
193	(Head r., laureate.)	"	"	"		IL. p. 114, 100.
194	(Head r., laureate.)	"	"	AEQVITAS AVG (Aequitas to l., holding balance and sceptre.)		IL. p. 115, 122, var.
195	(Head r., bare.)	"	"	AFRICA		IL. p. 116, 140.
196	(Bust r., bare, draped.)	"	"	"		IL. p. 116, 141.
197	(Bust r., laureate, draped.)	"	"	"		IL. p. 116, 144.
198	"	"	"	ANNONA. AVG		IL. p. 118, 172.
199	"	"	"	ASIA		IL. p. 120, 188.
200	HADRIANVS AVGVSTVS			COS III (Pallas, standing l., with shield and lowered spear.)		IL. p. 131, 297 (but P P omitted from obv. legend).

* NEP in reverse inscription omitted in Cohen (cf. *Nouv. Chron.*, 1910, p. 24, No. 79).

HADRIAN. 117-138 A.D.—*continued*.COS III—*continued*.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Méd. Imp.</i> , 2nd edition.
201	HADRIANVS AVGVSTVS	COS III (Neptune to l., foot on prow, holding dolphin and sceptre.)	II. p. 132, 310.
202	"	" (Vesta or Concord (?), seated l.)	II. p. 134, 328.
203, 204	"	" (Hercules, seated r.)	II. p. 134, 330.
205	"	" (Rome, seated r.)	II. p. 135, 337.
206-208	"	" (Rome, standing l., holding Victory and spear.)	II. p. 136, 349.
209-211	"	" (Virtus to r., foot on helmet.)	II. p. 136, 353.
212, 213	"	" (Victory, seated l.)	II. p. 136, 360.
214-216	"	" (Annona, seated l., holding cornucopiae and sickle, modius at feet; globe in exergue.)	II. p. 138, 379. ^s
217	"	" (Annona, seated l., holding cornucopiae and sickle, modius at feet; no globe in exergue.)	II. p. 138, 379. ^s
218	HADRIANVS AVGVSTVS P P	" (Annona, seated l., holding cornucopiae and sickle, modius at feet; no globe in exergue.)	II. p. 138, 380. ^s
219	HADRIANVS AVGVSTVS	" (Spes, walking l.)	II. p. 139, 390.

220-2.	"	"	(Pudicitia, standing l.)	II. p. 139, 392.
223	"	"	(Pudicitia, seated l.)	II. p. 139, 398.
224	"	"	(Female figure to l., foot on cuirass (?), holding lituus (?) and cornucopiae.)	II. p. 140, 399. ^a
225	"	"	(Simpulum, aspergillum, capis, and lituus.)	II. p. 144, 454.
226	"	"	(Seven stars on crescent.)	II. p. 145, 466.
227	"	"	(Modius, with six corn-cobs.)	II. p. 145, 470.
228, 229	HADRIANVS AVG COS III P P		FELICITAS P R (Felicitas to l.)	II. p. 161, 649.
230	"	"	FELICITATI AVGVSTI (Boat rowed to l.)	II. p. 167, 713.
231, 232	"	"	FIDES PVBLICA	II. p. 168, 716.
233	(Bust r., bare.)	"	"	II. p. 168, 717.
234	(Bust r., laureate.)	"	FORTVNA AVG (Fortuna, standing-l., holding rudder and cornucopiae.)	II. p. 171, 702.
235	"	"	FORTVNAE REDVCI	II. p. 173, 789.

^a Cohen calls this type *Abundantia*, and the object in her right hand a poppy. That the object she holds is not a poppy is quite certain, a sickle seems the most likely interpretation. For the personification of Annona, see Gneecchi, *I Tippi Monetarii*, p. 59 and Pl. x.

^b See *Num. Chron.*, 1910, p. 26, No. 92.

HADRIAN. 117-138 A.D.—*continued.*COS III.—*continued.*

No.	Obverse.	Reverse.	Reference to Cohen, <i>Méd.</i> <i>Imp.</i> , 2nd edition.
286	HADRIANVS AVG COS III P P	ITALIA	II. p. 178, 869.
297, 298	IMP CAESAR TRAIAN HADRI- ANVS AVG	P M TR P COS III (Genius, standing l., beside altar.)	II. p. 197, 1091.
299-241	" " "	" " " (Rome, seated l., shield behind, helmet below.)	II. p. 198, 1103.
242-244	" " "	" " (Aeternitas, standing l.)	II. p. 199, 1114.
245	" " " (Bust r., draped, and wearing cuirass.)	" " (Aequitas, standing l.)	II. p. 199, 1118.
246, 247	" " " (Bust r., undraped.)	" " "	II. p. 199, 1120.
248-250	" " "	" " (Victory to r., holding trophy.)	II. p. 200, 1132.
251	" " "	" " (Pax, standing l.)	II. p. 201, 1140.
252, 253	" " "	" " (Concordia, seated l.)	II. p. 201, 1149.
254	" " "	" " (Hadrian, standing l.)	II. p. 203, 1162.
255	" " "	" " CLEM in exergue. (Clementia to l., leaning on column, beside altar.)	II. p. 122, 214.

250	"	"	"	"	"	FEL P R in exergue.	II. p. 158, 600.
257	"	"	"	"	"	LIBERAL AVG III in exergue. (Hadrian, seated l., on platform, behind him praefectus praetorio standing on steps, facing; before Hadrian man mounting other steps; in background Liberalitas.)	II. p. 181, 911.
258	"	"	"	"	"	SAL AVG in exergue.	II. p. 216, 1327.
259	"	"	"	"	"	SALVS AVG in exergue.	II. p. 218, 1354.
260	"	"	"	"	"	VOT PVB in field. (Pietas, standing r.)	II. p. 229, 1477.
261	HADRIANVS AVG COS III P P					ROMAE AETERNAE	II. p. 215, 1312.
262	"	"	"	"	"	SALVS AVG (Salus to r., feeding snake.)	II. p. 216, 1335.
263	(Head r., laureate.)	"	"	"	"	(Salus to l., beside altar, holding patera and sceptre.)	II. p. 216, 1329.
264	(Bust r., bare, draped.)	"	"	"	"	(Salus to l., beside altar, holding patera and sceptre.)	" " Var., omitted.
265	HADRIANVS AVGVSTVS (Head r., laureate.)					SECVR PVB COS III P P	II. p. 222, 1399.
266	"	"	"	"	"	"	" " Var., omitted.
267	HADRIANVS AVG COS III P P					TELLVS STABIL (Female figure to l., holding plough rake (?).)	II. p. 225, 1427.

HADRIAN. 117-138 A.D.—*continued*.Cos III.—*continued*.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Méd. Imp.</i> , 2nd edition.
268	HADRIANVS AVGVSTVS (Bust r., undraped.)	TRANQVILLITAS AVG COS III P P	II. p. 225, 1440 (var.).
269	HADRIANVS AVG COS III P P	VICTORIA AVG (Victory to r., uncovering breast and holding branch.)	II. p. 227, 1454.
270, 271	SABINA AVGVSTA AVG P P	SABINA. 128-136 A.D. CONCORDIA AVG (Concordia, seated l., holding patera, left arm on statuette of Spes.)	II. p. 248, 12.
272	" "	" (Concordia, seated l., holding patera and sceptre.)	II. p. 249, 25.
273	SABINA AVGVSTA	IVNONI REGINAE (Juno, veiled l., holding patera and sceptre.)	II. p. 250, 43.
274	SABINA AVGVSTA AVG P P	PVDICITIA (Pudicitia, standing l.)	II. p. 252, 62.

L. AELIUS. 136-138 A.D.

Cos II.

275	AELIVS CAESAR TR P COS II	CONCORDIA	II. p. 259, 14.
	AELIVS CAESAR	TR POT COS II (Spes to l.)	II. p. 259, 14.

ANTONINUS PIUS. 138-161 A.D.

Cos I.			
277	IMP T AEL CAES ANTONINVS	TRIB POT COS (Pietas to L., beside altar.)	IL. p. 372, 1062.
Cos Dns. II.			
278	IMP T AEL CAES HADRI AN- TONINVS	AVG PIVS P M TR P COS DES II (Aequitas, standing L.)	IL. p. 277, 78.
Cos II.			
279	IMP T AEL CAES HADR AN- TONINVS	AVG PIVS P M TR P COS II (Pax, stand- ing L.)	IL. p. 278, 85.
280	"	" " (Fortuna, standing L.)	IL. p. 278, 88.
281	"	" " (Victory to r.)	IL. p. 279, 99.
282	ANTONINVS AVG PIVS P P (Head, laureate r.)	TR P COS II (Aspergillum, capis, lituus, and simpulum.)	IL. p. 352, 895, var.
283, 284	"	TR POT COS II (Felicitas, standing r., holding caduceus and cornucopiae.)	IL. p. 353, 851.
285	"	" " (Pax, standing L., hold- ing branch and cornucopiae.)	Omitted (cf. IL. p. 354, 856).
Cos III.			
286	ANTONINVS AVG PIVS P P TR P COS III	AEQVITAS AVG	IL. p. 271, 14.
287	(Head r., bare.)	APOLLINI AVGVSTO	IL. p. 276, 59.

ANTONINUS PIUS. 138-161 A.D.—*continued*.Cos III.—*continued*.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Méd.</i> <i>Imp.</i> , 2nd edition.
288	ANTONINVS AVG PIVS P P TR P COS III (Head r., laureate.)	APOLLINI AVGVSTO	II. p. 276, 60.
289	" " "	CLEMENTIA AVG	II. p. 283, 125.
290	" " "	CONCORDIA AVG (Concordia to r., holding sceptre and cornucopiac.)	II. p. 284, 135.
291	ANTONINVS AVG PIVS P P (Bust r., bare, draped.)	TR POT COS III (Italia, seated l., on globe.)	II. p. 356 890, var.
ANTONINUS, Cos III; AURELIUS, Cos I.			
292	ANTONINVS AVG PIVS P P TR P COS III (Head r., laureate.)	AVRELIVS CAESAR AVG PII F COS	II. p. 410, 21, var.
Cos IV.			
293	ANTONINVS AVG PIVS P P	COS IIII (Vesta, standing l., holding patera and sceptre.)	II. p. 292, 203.
294	" " "	" (Aequitas, standing l., holding balance and sceptre.)	II. p. 292, 228.
295-298	" " "	" (Clasped hands, holding caduceus and two corn-ears.)	II. p. 304, 344.
299	" " "	" (Thunderbolt on throne.)	II. p. 304, 345

300	"	"			TEMPLVM DIV AVG REST COS IIII in exergue.		II. p. 330, 331.
301, 302	ANTONINVS AVG PIVS P P TR P XII				COS IIII (Antoninus, standing l., sacrificing.)		II. p. 300, 301.
303	"	"	"		" (Fortuna, standing l.)		II. p. 297, 298.
304	ANTONINVS AVG PIVS P P TR P XIII				" "		II. p. 297, 298.
305	ANTONINVS AVG PIVS P P TR P XVI				" (Fortuna, standing r.)		II. p. 298, 299.
306	ANTONINVS AVG PIVS P P TR P XVIII				" (Abundantia, standing l.)		II. p. 299, 299.
307	ANTONINVS AVG PIVS P P IMP II				TR POT XIX COS IIII (Salus, seated l.)		II. p. 304, 302.
308	ANTONINVS AVG PIVS P P TR P XXIII				FELICITATI AVG COS IIII		II. p. 307, 304.
CONSECRATION COINS OF ANTONINVS PIUS. OR. 161 A.D.							
309	DIVS ANTONINVS				CONSECRATIO (Eagle to r., head turned l., on altar.)		II. p. 287, 155.
310, 311	"	"	"		" (Funeral pyre.)		II. p. 288, 164.
312	"	"	"		DIVO PIO (Altar.)		II. p. 306, 357.

FAUSTINA SENIOR, 138-141 A.D.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Méd.</i> imp., 2nd edition.
313	FAVSTINA AVGVSTA	CONCORDIA AVG (Concordia, standing l.)	II. p. 425, 151.
314	" "	IVNONI REGINAE (Peacock below throne.)	II. p. 430, 219.
CONSECRATION COINS OF FAUSTINA. OB. 141 A.D.			
315, 316	DIVA FAVSTINA	AETERNITAS (Aeternitas, standing l., holding globe and rudder.)	II. p. 414, 6.
317	" "	" (Aeternitas, standing l., holding sceptre.)	II. p. 415, 26.
318	" "	AVGVSTA (Ceres, standing l., holding two corn-ears and long torch.)	II. p. 420, 78.
319	" "	" (Ceres, standing l., holding torch and sceptre.)	II. p. 421, 96.
320	" "	" (Ceres, standing l., holding long torch and holding up her skirt.)	II. p. 421, 104.
321	" "	" (Vesta, standing l., holding patera and palladium.)	II. p. 422, 115.
322	" "	" (Vesta, seated l., holding patera and sceptre.)	II. p. 422, 120.
323	" "	" (Pietas, standing l., beside altar, holding box of perfumes.)	II. p. 422, 124.

324	"	CERES (Ceres, standing l.)	II. p. 123, 36.
325, 326	DIVA AVG FAVSTINA	PIETAS AVG (Pietas dropping incense on altar.)	II. p. 431, 234.
MARCUS AURELIUS. 161-180 A.D.			
Cos I.			
327	AVRELIVS CAESAR AVG PII F COS	HONOS	III. p. 25, 236.
328	" " "	PIETAS AVG	III. p. 47, 451.
Cos II.			
329-332	AVRELIVS CAESAR AVG PII F	COS II (Pax, standing l.)	III. p. 12, 105.
333	" " "	TR POT II COS II (Pallas, standing r.)	III. p. 61, 608.
334-336	" " "	TR POT III COS II (Pallas, standing r.)	III. p. 62, 618.
337	AVRELIVS CAES ANTON AVG PII F	TR POT XI COS II (Warrior, standing l.)	III. p. 71, 721.
Cos III.			
338	IMP M AVREL ANTONINVS AVG	PROV DEOR TR P XV COS III (Providentia, standing l.)	III. p. 52, 508.
339	M ANTONINVS AVG IMP II	CONCORD AVG TR P XVIII COS III in exergue.	III. p. 7, 44.
340	" " "	TR P XVIII COS III (Pallas, standing l.)	III. p. 83, 849.

MARCUS AURELIUS. 161-180 A.D.—*continued*.Cos III.—*continued*.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Méd. Imp.</i> , 2nd edition.
341	ANTONINVS AVG ARMENIACVS	P M TR P XVIII IMP II COS III (Warrior to r.)	III. p. 48, 469.
342	M ANTONINVS AVG ARM PARTH MAX	TR P XX IMP IIII COS III (Victory, hanging shield on trophy.)	III. p. 86, 878.
343	" " "	" " " PAX in exergue.	III. p. 45, 495.
344	" " "	TR P XXII IMP V COS III (Aequitas, standing l.)	III. p. 89, 901.
345	M ANTONINVS AVG TR P XXIII	LIBERAL AVG V COS III	III. p. 42, 412.
346, 347	M ANTONINVS AVG TR P XXIII	SALVTI AVG COS III	III. p. 56, 543.
348	M AVREL ANTONINVS AVG	TR P XXXIII IMP X COS III P P (Fortuna, seated l.)	III. p. 96, 972.
FAUSTINA JUNIOR. 147-176 A.D.			
349	FAVSTINA AVG ANTONINI AVG PII FIL	CONCORDIA (Concordia, seated l.)	III. p. 140, 53.
350	FAVSTINA AVG PII AVG FIL	" " "	III. p. 140, 54.
351	FAVSTINAE AVG PII AVG FIL	VENVS (Venus, standing l., dolphin on her rudder.)	III. p. 158, 266.

352	INA AVGVSTA	AVGVSTI PII FIL (Venus, standing l.)	III. p. 197, -.
353	"	HILARITAS	III. p. 145, 111.
354	"	IVNO	III. p. 146, 120.
355	"	IVNONI REGINAE	III. p. 147, 139.
356	"	LAETITIA	III. p. 148, 148.
357	"	SAECVLII FELICIT	III. p. 152, 190.
L. VERUS. 161-169 A.D.			
Cos II.			
358	IMP L AVREL VERVS AVG	PROV DEOR TR P II COS II	III. p. 185, 155.
359	L VERVS AVG ARM PARTH MAX	TR P VI IMP IIII COS II PAX in exergue.	III. p. 188, 126.
ANNIA LUCILLA. 164-169 A.D.			
360, 361	LVCILLAE AVG ANTONINI AVG F	DIANA LUCIFERA	III. p. 216, 16.
362	"	PIETAS	Omitted (cf. III. p. 219, 56).
363, 364	"	VENVS	III. p. 220, 70.
365	"	VOTA PVBLICA	III. p. 228, 98.
COMMODUS. 177-192 A.D.			
Cos I.			
366	IMP CAES L AVREL COM- MODVS GERM SARM	TR POT II COS (Salus, standing l.)	III. p. 327, 741.

COMMODUS. 177-192 A.D.—*continued*.

Cos II.

No.	Obverse.	Reverse.	Reference to Cohen, <i>Mét.</i> <i>Imp.</i> , 2nd edition.
367	L AVREL COMMODVS AVG	TR P III IMP III COS II P P (Victory, seated l.)	III. p. 331, 775.
PROVINCIAL COIN OF TRAJAN (Cos II).			
LYCIA.			
368	AVT KAIC NEP TRAIANOC CEB ΓΕΡΜ	ΔΗΜ ΕΞ ΥΠΑΤ Β (Two lyros with owl.)	<i>B.M. Cat.: Lycia</i> , p. 39, 9.
CONTEMPORARY FORGERY (CAST).			
TRAJAN, Cos VI.			
369	IMP CAES NER TRAIANO OP- TIMO AVG GER DAC	P M TR P COS VI P P S P Q R (Genius, standing l.)	Cf. Cohen, ² II. p. 46, 276.

GEORGE C. BROOKE.

X.

ANGLO-GALLIC COINS.

(Continued from Vol. VIII. p. 177.)

(See Plate VIII.)

HENRY V.

AT the date of Henry V's accession to the throne of England, on March 20, 1413, France was divided into two factions. The King of France, Charles VI, was a madman, and a state of civil war practically existed between the Burgundian party headed by the Duke of Burgundy and the Armagnac party headed by the Duke of Orleans, who were both struggling for the supreme power in France.

England had already joined in the struggle, and in May, 1412, Henry IV entered into an alliance with the Armagnac party, promising them his support in exchange for the cession of Aquitaine. Thomas, Duke of Clarence, was appointed the King's lieutenant in Aquitaine on July 11, 1412, and crossed into Normandy in August. In November he went to Aquitaine, where he stayed till the following summer.

~~From~~ From the beginning of his reign Henry V appears to have contemplated an active intervention into French

affairs. He finally formulated his demands in February, 1415. He laid claim to the throne of France, but

intimated his willingness to accept certain terms instead. These terms included the fulfilment of the treaty of Brétigny, the cession of certain lands, and the hand of Catherine of France in marriage. These terms were rejected and others proposed and discussed, but without result. Finally, war was declared, and on August 7, 1415, Henry embarked for France.

He landed at Harfleur, which he besieged and took on September 22, 1415. On October 8, he set out from Harfleur for Calais, leaving a garrison behind him. He reached Calais on October 29, after having defeated the French forces at Agincourt on October 25. He then returned to England.

The only result of this first invasion was the capture of Harfleur and the moral effect of the victory at Agincourt.

In the summer of 1417, a second invasion was determined on, and on August 1, Henry again embarked for France. He landed near Trouville and proceeded to lay siege to Caen, which fell on September 4. This time Henry intended his campaign to be decisive, and on the fall of Caen, he proceeded at once to lay the foundations for the new government of the town. He posed as the rightful Duke of Normandy, the heir of William the Conqueror, and he offered peace and justice to all who acknowledged him as such. He then proceeded to carry out the conquest of Lower Normandy by taking Argentan and Alençon, staying at the latter place a whole month to consolidate his conquests. In December, he laid siege to Falaise, which fell on February 16, 1418. He returned to Caen, where he organized the government of the Duchy, spending three months there and at Ba. He provided for the civil administration of the Duchy,

revived the *Rotulus Normanniae*, appointed a Chancellor and other minor officials, and created six Norman Earldoms.

In July, matters were ripe for the most serious undertaking of the campaign, the siege of Rouen. On July 29, Rouen was invested, and on January 19, 1419, it fell. With Rouen in his possession, practically the whole of Normandy was in Henry's power, and he was then free to turn his attention to his larger claim to the throne of France.

The English successes in Normandy did not have the effect of uniting the Burgundian and Armagnac factions, which were still as bitterly opposed to each other as before. In fact, their quarrels paved the way for Henry's successes, and by negotiating first with one party and then with the other, Henry contrived to keep both apart. The crisis came when the Duke of Burgundy was assassinated by the Armagnac party in the presence of the Dauphin on the bridge at Montereau on August 21, 1419. This threw the Burgundian party entirely into the hands of Henry, and the new Duke of Burgundy, Philip the Good, backed by Queen Isabella, offered Henry the hand of Catherine of France in marriage, with the Regency of France during Charles's lifetime, and the succession to the throne, to the exclusion of the Dauphin, on Charles's death. These terms were ratified on January 3, 1420, and a formal treaty was signed at Troyes on May 21, 1420.

In the mean time, Henry had laid siege to Gisors, which fell on September 24, 1419. He had returned to Rouen at the end of November and had spent the following four months there.

On December 1, 1420, Henry made his formal entry to Paris, where he spent Christmas. He then returned

to Rouen, where he held a parliament of the Estates of Normandy. He left on January 19, 1421, for England, where he arrived on February 1, after an absence of three and a half years.

His stay in England was brief. He sailed again for France on June 10, 1421, and resumed his operations against the towns in Northern France which still held out against him. The winter and spring were chiefly occupied by the siege of Meaux, at which the English suffered heavily through sickness. It was probably during this time that Henry contracted the illness of which he died. In the middle of August, 1422, he was taken to his castle in the Bois de Vincennes, outside Paris, where he died on the morning of September 1.

The Anglo-Gallic coinage of Henry V and Henry VI has been exhaustively dealt with by M. de Saulcy in his *Histoire Numismatique de Henri V et Henri VI, Rois d'Angleterre, pendant qu'ils ont régné en France*, published in Paris in 1878. M. de Saulcy has collected and published in this work all the known ordinances and records relating to the coinage of this period. I have extracted from his book sufficient information to enable me to classify the coinages of these reigns, but I would strongly recommend any one who wishes to study the coins of this period to refer to M. de Saulcy's work itself, where they will find the actual wording of the ordinances and records fully set out.

The first of the ordinances¹ is dated May 8, 1419, four months after the fall of Rouen, from Vernon-sur-Seine, where Henry had gone for Easter to await a conference with Queen Isabella and the Duke of Burgundy. It is

¹ *Patentes Normannie*, 50.

addressed to the bailiffs of Evreux, Gisors, Caux, Rouen, Caen, Cotentin, and Alençon, and regulates the price of French money admitted to currency in Normandy. The coins mentioned are as follows:—

The grand blanc of Charles VI with a shield of three fleurs-de-lis.

The grand blanc of Burgundy.

The grand blanc of Brittany with nine ermines.

The three corresponding petits blancs.

The grand blanc of France was to be current for two blancs and the petit blanc for one blanc. The same value was placed on the grand blanc and petit blanc of Burgundy.

The grand blanc of Brittany was to be current for eight deniers tournois and the petit blanc for four deniers tournois.

Although this is the first ordinance cited by M. de Saulcy, it is certain that Henry had made some provision for a coinage for Normandy before this date. It is possible, as we shall see later, that he had established a temporary mint at Caen either in September, 1417, or, more probably, during his three months' stay from March to May, 1418. He certainly struck coins at Rouen very shortly after its capture, as such an issue is alluded to in the ordinance of September 25, 1419, set out below, but the ordinance providing for such coinage has not yet been discovered. A careful search among the Normandy Rolls at the Record Office might bring it to light.

The next ordinance mentioned by M. de Saulcy is a most important one. It is dated September 25, 1419, from Gisors.² It is as follows:—

“Henry to all &c. Greeting.

“Whereas after our joyful conquest and entry into our town

² *Pat. Norm. anni septimi Hen. V.*, p. 1^a m. 19 dorso, m. 50 dorso.

of Rouen, we ordered and commanded to be made at our mint of Rouen gold and silver coins in *petits moutons* and *gros* in the form and manner in which they were made before our said conquest and entry, both in weight and fineness, without diminution or addition thereto and saving the rights of our Seigneur, except for the distinguishing marks (differences) which have been ordered by us to be placed thereon. . . .

"On all our coins struck for the future, *moutons d'or*, *gros*, *demi-gros*, *quarts de gros*, *d'argent*, *mansois* and *petits deniers*, let there be placed on the large cross, in the centre thereof, an *H*, as accurate as possible, with the distinguishing marks which we have formerly ordered."

The ordinance proceeds to provide for the issue of the *quart de gros*, *mansois*, and *petit denier*. This apparently implies that these were new denominations, of which it was necessary to give full particulars.

The *quart de gros* was to be current for five *deniers tournois*, and was to be struck at the rate of 13 *sols* 4 *deniers* (*i.e.* 160 pieces) to the mark. The mark weighed 4063·2 grains, which gives a weight of 25·4 grains to the *quart de gros*. The type was to be on the obverse a shield with three *fleurs-de-lis*, similar to that on the *demi-gros*.

The double, or *mansois*, was to be current for two *deniers tournois*, and was to be struck at the rate of 16 *sols* 8 *deniers* (200 pieces) to the mark, giving a weight of 20·3 grains. The obverse type was to be three *fleurs-de-lis*.

The *petit denier* was to be current for one *denier tournois*, and to be struck at the rate of 25 *sols* (300 pieces) to the mark, giving a weight of 13·5 grains. The obverse type was to be two *fleurs-de-lis*.

There are several important points to notice in this ordinance. In the first place, it alludes to an issue of

moutons and gros made soon after the taking of Rouen on January 19, 1419. It also alludes to the demi-gros as a coin in currency, but not to its issue with the mouton and gros. It provides for an entirely new issue of moutons, gros, demi-gros, quarts de gros, mansois, and petits deniers, which are all to be distinguished from the former issue by having an h in the centre of the cross on the reverse, and gives the types for the last three denominations, which were evidently new.

The same ordinance also made the following provisions:—

The English Noble should be current for “48 gros of our money on which HENRICVS is written on the obverse and which has a leopard beside the cross, which are worth four francs.”

The petit mouton, then current for 12 gros, should be current for 18 gros of the aforesaid money, which were worth 30 sols tournois,³ and should be of the same weight and fineness as the mouton then current, namely, 22 carat and 96 to the mark (giving a weight of 42·3 grains).

The English Noble should be current for 60 gros of Charles, which were worth 100 sols tournois.

The ordinance further forbids the export of bullion, and orders that it shall be brought to the Rouen Mint.

On January 12, 1420,⁴ a new issue was ordered. Letters patent⁵ were addressed to the masters of the mint at Rouen enjoining them, in order to do away with the import into Normandy of French gold and silver

³ Note 30 sols tournois = 360 deniers tournois. A gros was worth 20 deniers tournois.

⁴ The date given is January 12, 1419 (old style). I have throughout adopted the new style to avoid confusion.

⁵ *Rot. Norm.*, anno 7 Hen. V., p. 2^a m. 50 dorso.

money which was debased both in weight and fineness, to strike at Rouen gros current for 20 deniers tournois at the rate of 6 sols 8 deniers (80 pieces) to the mark (weighing 50·8 grains). They were to have for obverse type three fleurs-de-lis below a crown, and at the sides of the fleurs-de-lis two leopards supporting the fleurs-de-lis, with the legend HENRICVS FRANCORVM REX; in the middle of the cross on the reverse an h, as accurate as possible, with the distinguishing marks formerly placed on the gros theretofore made, with the legend SIT NOMEN DNI BENEDICTV.

The same letters patent also provide for the coinage of gold florins, or petits fleurins d'or, called escus, at the rate of 96 to the mark (weight 42·3 grains) which were to be current for "24 réaulx which are worth 2 francs." The obverse type was to be a shield with the arms of France and of England, and the legend HENRICVS DEI GRA · FRANCIE · ET ANGLIE; on the reverse, a cross with h in centre, as accurate as possible, with two leopards and two fleurs-de-lis in the angles, and the legend XPC · VINCIT · XPC · REGNAT · XPC · IMPERAT.

The gros of this issue is quite common, but the écu has not yet been found, though there is no reason to doubt that it was issued. The réaulx alluded to are the same as the gros, the coin being known under both names.

On February 1, 1420, Henry issued an ordinance⁶ calling in certain money. This ordinance recites that Henry had, on the taking of Rouen, ordered to be struck at the Rouen Mint, and at his other mints in Normandy, gros called royaulx, current for 20 deniers tournois, of the same type, weight, and fineness as those struck there

⁶ *Rot. Norm.*, m. 24 dorso.

before his conquest, and had placed thereon a distinguishing mark; and that it had come to his knowledge that there had been imported into Rouen, and into Normandy generally and other places which had submitted to him, a large amount of money in gros of many countries not under his rule, parts of France, Brittany, and elsewhere, which gros were of similar pattern, or near thereto, to those struck at Rouen before his conquest, but were of less weight and fineness than those struck by him; and under cover of their similarity they obtained currency in Normandy to the great detriment of himself and his people; and further, that, to obviate this, he had ordered by letters patent (see p. 186) the striking of gros current for 20 deniers tournois, having on the obverse three fleurs-de-lis supported by two leopards, and an h in the centre of the cross on the reverse, with certain distinguishing marks, and also quarts de gros, mansois, and petits deniers. The ordinance then provides that the said coinage of gros, quarts de gros, mansois, and petits deniers should be current in all Normandy and places which had submitted to him, and also all other money theretofore struck by him according to the types theretofore ordered, but that the gros and other silver coins not bearing those types should not be current after May 1, 1420, up to which date all persons having such money were permitted to deliver it up, and after that date he forbade its currency on pain of forfeiture.

It will be noticed that there is no mention of a demi-gros in this ordinance.

On April 14, 1420, officials were appointed to the Mint at St. Lô.^{6a} On the 18th of the same month they

^{6a} *Rot. Norm.*, m. 24 dorso.

were ordered⁷ to strike gros, current for 20 deniers tournois. The order sets out the type, weight, and fineness of these gros, which are identical with those of the Rouen gros of January 12, 1420 (p. 186), with the exception that the gros of St. Lô was to bear as a distinguishing mark a pellet below the second letter of the legend on both obverse and reverse, and the reverse legend is given as SIT NOMEN DOMINI BENEDICTVM.

On May 6, 1420, an ordinance was sent to the masters of the mint at Rouen announcing a new issue.⁷ It sets out that Henry, on the advice of his Council, had decided to strike at all his mints for the future a gold coin current for 22 sols 6 deniers tournois, and at the rate of 66 to the mark (weighing 61·5 grains), "of which deniers of gold we will send you the type and the name by which we wish them called, with the standards" (estallons).

It seems doubtful whether these deniers d'or were ever struck. The dies were evidently not ready, and the Treaty of Troyes was signed on the 21st of the same month, necessitating a change in the King's titles. There is no record of the dies being subsequently sent.

The same ordinance also provides for the issue of deniers blancs d'argent, called gros, to be current for 20 deniers tournois and to be struck at the rate of 7 sols 2½ deniers (86¼ pieces) to the mark (weight 47·1 grains). This is a slight reduction in weight from the previous issue. The ordinance further provides for the issue of demi-gros, current for 10 deniers tournois and at the rate of 14 sols 4½ deniers (172½ pieces) to the mark (weight 23·5 grains). The ordinance adds, "of which gros and demi-gros we send you the types with the

⁷ *Rot. Norm.*, m. 10 dorso.

dies enclosed herewith and such moneys of silver shall not be whitened but shall be issued as they come from the hand of the workmen."

The ordinance proceeds: "And also we have ordered to be made many moneys of silver and billon (*blanches et noires*) of which at present we do not send you the types." Then follows an order to take at once an inventory of all gold and silver bullion at the mint, to close all the trial boxes ("*boîtes*"),⁸ and not to permit any more work on the dies (*fers*) then in use. These dies, placed out of use, were to be broken, and the ordinance continues, "and strike in our said mint the said gros and demi-gros as is written, in the proportion of two gros to one demi-gros, and place for a distinguishing mark, on all the said moneys of gold and of silver, both on obverse and reverse, under the first letter, a pellet."

A duplicate of this ordinance was sent to the mint at St. Lô, except that the ordinance concludes, "and place for a distinguishing mark on all the said moneys of gold and of silver, both on obverse and reverse, under the second letter, a pellet."

Two "piles" and four "trousseaux" for the gros and demi-gros were sent to St. Lô.

Finally, it was ordered to place in the trial boxes one denier of gold for every 11 marks (726 pieces) issued, and of the silver and billon the usual proportion.

The Treaty of Troyes was signed on May 21, 1420.

On June 2, 1420, the necessary powers were given to the Treasurer-General of Normandy to organize the mint

⁸ Boxes in which were placed a certain proportion of coins of every issue, which were tested from time to time to see that they were of the proper weight and fineness.

at St. Lô, and at the same time an order was issued to take to the castle at Caen the chests (caisses) containing the new coins which should be struck and which should remain deposited there pending a new order duly issued under the seal of the master of the mint at Caen.⁹

On June 16, 1420, the ordinance providing for the new issue necessitated by the Treaty of Troyes appeared.¹⁰ The preamble is as follows:—"Henry, by the grace of God, King of England, Heir and Regent of the Realm of France and Lord of Ireland to the masters of Our Mint in Our city and town of Rouen, greeting."

The ordinance provides for the issue of "blancs deniers" called gros, current for 20 deniers tournois and at the rate of 8 sols 4 deniers (100 pieces) to the mark (weight 40·6 grains), "similar in type to those at present struck at our said mint," except that they were to bear on the obverse in place of the legend HENRICVS FRANCORVM REX the legend H REX ANGLIE ET HERES FRANCIE.

A similar order was addressed to the masters of the mint at St. Lô.¹⁰

The gros struck in pursuance of this ordinance is of similar type to that struck at Rouen under the ordinance of January 12, 1420, and at St. Lô under the ordinance of April 18, 1420. It is not of the type of the gros struck under the ordinance of May 6, 1420.

On November 20, 1421, a new issue was decided on. It is stated to have been ordered "on the advice of many of our blood and lineage and of our Grand Council and at the request of the three Estates of our country and Duchy assembled at Rouen."

⁹ *Rot. Norm.*, m. 32 dorso.

¹⁰ *Pat. Norm.*, m. 29 dorso.

The letters patent¹¹ stated as follows :—

“ We have struck in certain places of our said Duchy, a great quantity of fine money, which should be current for 20 deniers tournois, and it is no longer advisable that such money should continue in currency on account of the great frauds and deceptions which he who calls himself Dauphin and those of his party, enemies of our dear father of France and of ourselves, has begun ; who has struck with the arms of our dear father of France gros of too little value with the intention of taking away for themselves the good gros struck by our said father-in-law and ourselves, in order to enrich themselves with our good money and to impoverish our subjects with their bad money, if our said money continues to be of the type which we have ordered ; but to obviate for the present their malice and to provide still for the public good of our country of Normandy and the country which we have conquered, money of equal value with the said money, we have lately, with great deliberation, ordered to be struck in our mints many deniers of gold and silver, that is to say, deniers of fine gold called salutes, current for 25 sols, demi-salutes current for 12 sols 6 deniers tournois, deniers blancs called doubles current for 2 deniers tournois and petits deniers blancs current for one denier tournois ; and we order that the écus d’or struck for the future by our said father-in-law in his mints shall be current for 22 sols 6 deniers tournois and the moutons lately struck in the mints of our said father-in-law and of ourselves for 15 sols tournois, the nobles struck by us in England for 45 sols tournois, the half nobles for 22 sols 6 deniers tournois and the quarter nobles for 11 sols 3 deniers tournois and the gros which have been struck in the mints owing allegiance to our father-in-law and ourselves, formerly current for 20 deniers tournois and a short time ago reduced to 5 deniers tournois, from the date of the publication hereof shall be current for 2 deniers and a maille tournois.”

Similar letters were addressed to all the bailiffs of Normandy.

¹¹ *Rot. Norm.*, m. 17 dorso.

The author of the life of Charles VI (Pierre de Fenin)¹² says, "King Henry struck small coins called doubles, worth 3 mailles. These were commonly called *niquets*. There was not at that period any other money, and when one had 100 florins' worth of them, it was a man's burden. It was a good money for its price; however he struck blancs doubles."

This completes the records of the coinage of Henry V.

We may summarize the results of these records as follows:—

Soon after January 19, 1419, the mint at Rouen was established, and the mouton d'or and gros d'argent were struck. The demi-gros was also struck, possibly at a temporary mint, before this date.

On September 25, 1419, the order was issued that all coins should bear an *n* in the centre of the cross on the reverse. The mouton d'or, and the quart de gros, mansois, and petit denier were struck.

On January 12, 1420, the écu d'or and the gros with leopard supporters were issued. The écu d'or is not known at present.

On April 14, 1420, the mint at St. Lô was opened, and the gros with leopard supporters was struck.

On May 6, 1420, a new gold coinage was ordered, but probably never issued. A new type of gros and demi-gros were issued.

On June 16, 1420, the gros with leopard supporters and the legend "*Heres Francie*" was struck.

On November 20, 1421, the salute and demi-salute, double tournois and denier tournois were issued. The demi-salute is not known at present.

¹² See *Leblanc*, p. 243.

We will now pass on to a description of the coins.

GOLD COINAGE.

Mouton d'Or.

First Issue. January 19, 1419–September 25, 1419.

Obv.—✠ ΡΓΝ ∶ ΔΑΙ ∶ QVI TOLL ΡΑΥΑ ΜΥΔΙ ΜΙΣΑ
 ΝΟΒΙΣ. Stops, annulets; pellet below D of
 ΜΥΔΙ (20th letter). Paschal Lamb to l.,
 within a tressure of ten arches; beaded inner
 circle. ΗΡ—RX below, divided by the staff
 of the banner. The banner is waving in the
 wind and ends in two points; the staff is
 surmounted by a small cross.

Rev.—✠ ΧΡΑ . VINQIT . ΧΡΑ . ΡΑΓΝΑΤ . ΧΡΑ .
 ΙΝΡΑΤ. Stops, quatrefoils; pellet below P
 in 3rd ΧΡΑ (20th letter). Cross fleury within
 a quatrefoil compartment, with fleurs-de-lis
 in spandrils; no inner circle. Fleur-de-lis in
 1st and 4th angles; leopard passant guardant
 to l. in 2nd and 3rd angles. Quatrefoil
 compartment enclosing a rosette in centre of
 cross.

Wt. 39·2 grs. [Pl. VIII. 1.]

British Museum.

The full weight of this coin is 42·3 grains. The pellet under the 20th letter was the mint-mark of Rouen under Charles VI. Henry subsequently altered the mint-mark to a pellet under the 1st letter of the legends, to signify that Rouen was his first or principal mint.

This coin is not very common, but it is the commonest of Henry's gold coins. Poey d'Avant describes two specimens in the French National Collection, and there was one specimen in the Montagu Collection.¹³

¹³ Lot 349 in the Montagu Catalogue is the Mouton of the second issue.

Second Issue. September 25, 1419–January 12, 1420.

Obv.—✠ ΛΘΝ . ΔΑΙ . ΟΥΙ ΤΟΛΛ . ΡΕΑΛ : ΜΥΡΙ
ΜΙΣΑ : ΝΟΒΙΣ. Stops, annulets; pellet
under 20th letter. Type as first issue;
ΗΡ__RX. below the Lamb.

Rev.—✠ ΧΡΑ . ΒΙΝΔΙΤ . ΧΡΑ . ΡΕΘΙΛΤ . ΧΡΑ .
ΙΝΡΕΑΤ. Stops, quatrefoils; pellet under
20th letter. Type as first issue, but Η in
centre of cross.

Wt. 38·2 grs. [Pl. VIII. 2.]

Bernard Roth Collection.

This coin is from the Montagu (lot 349) and O'Hagan (lot 664) Collections.

This type is extremely rare. There is a specimen in the French National Collection, which is described by de Saulcy. He says it weighs 38·7 grains and has no mint-mark.

I will here describe a mouton d'or which has been attributed to Henry V, and I will then give my reasons for considering that the attribution is a wrong one. I have dealt with the matter somewhat fully, as it has already been the subject of much controversy, and it will be as well to set out the arguments here.

The attribution is based on a manuscript in the archives of the Mint at Paris, known as Poullain's manuscript. De Saulcy (*op. cit.*, p. 75) quotes this manuscript as follows:—

“Item, feist faire ledit Henri moutonnetz de pareille façon de ceulx de France que faisoit faire le roy Charles VI^e à Paris, le 20^e jour d'octobre 1422, et les moutons lisoient Henricus, et avoient trois Ε sur la banniere du mouton et sont à 22 caratz.”

He adds that the illustration accompanying this note

is very defective. In the field below the lamb, h—R only can be read; the cross is surmounted by a trefoil, and the banner has two points and is waving in the wind (enroulée).



I have unfortunately been unable to inspect this manuscript myself. The date is evidently wrong, as it is after Henry's death.

M. Adrien de Longpérier, in an article in the *Numismatique Chronicle*, 1st Series, Vol. XII, p. 8, gives the wording of the manuscript as follows :

“Item, fit ouvrier ledit Henry en la même année (1415), en les monnoyes de Normandie, moutonnets pareils à ceux du roy Charles, la grande croix de devers la croix anglée de quatre fleur-de-lys. Et ont été faits à 22 karats et pour différence ont trois C sur la bannière.”

He adds that on the manuscript are drawings, posterior to the text, and often inexact. This mouton is figured with one C on the streamer of the banner, and two others, placed thus:—C O, at the extremities of the cross at the head of the staff. The horizontal arms of the cross cut these letters and give them the appearance of two α's.

The mouton which has been attributed to Henry V on the authority of this manuscript may be described as follows :—

Obv.—✠ ΑΓΗ . ΔΑΙ . QVI . TOLIS . ΠΕΑΧ . ΜΥΔΙ . ΜΙΣΑ . ΝΟΒ. Stops, pellets; annulet under η of ΑΓΗ. Paschal Lamb to l., looking backwards, with nimbus; within a tressure of nine arches. The staff of the banner is headed thus . The banner ends in three points.  RRL—RAX below the Lamb, divided by the staff of the banner.

Rev.—✠ XPC . VINQIT . XPC . RAGNAT . XPC .
INPƏRAT. Stops, pellets; annulet below X
of first XPC. Cross fleury within quatrefoil
compartment, with a fleur-de-lis in each
spandril; no inner circle. A fleur-de-lis in
each angle, rosette in centre.

Wt. 38·7 grs. [Pl. VIII. 3.]

British Museum.

This coin occurs with the annulet below the first, second, and third letters of the legends, on the obverse and reverse. It is commoner than either of the moutons of Henry described above.

M. Adrien de Longpérier, in his article quoted above, ascribed these moutons to Henry V, and his reasons for so doing appear in the article. Doubts on this attribution are expressed by M. Poey d'Avant and M. de Saulcy. M. le Comte de Castellane in an article in the *Annuaire de la Société Française de Numismatique* for 1896 (p. 465), entitled *Restitution à Charles Dauphin, fils de Charles VI de moutons attribués à Henri V d'Angleterre*, has, to my mind conclusively, proved that the attribution of M. de Longpérier is wrong.

Before discussing M. le Comte de Castellane's article, I may say that on all specimens of this coin which I have examined, the legend below the Lamb on the obverse is capable of being read as RRL instead of RRL. On some specimens it is quite clearly RRL, and indeed it is so rendered in the Murdoch Catalogue. It is very easy to mistake a R for an R and an L for an I. Indeed, in many cases, the legend is given in catalogues as RRL, the second I being clearly the upward stroke at the end of the L.

We will now examine the reasoning by which M. le

Comte de Castellane arrives at his conclusion that these coins were struck by Charles the Dauphin, the son of Charles VI.

If these moutons were struck by Henry V, they must have been issued either at his mints of Rouen or St. Lô, after the final conquest of Normandy and the organization of the mints; or else at some temporary mint before the fall of Rouen.

Rouen fell on January 19, 1419, and we have seen (p. 184) that Henry, after his entry into Rouen, ordered moutons to be struck "in the form and manner in which they were made before our said conquest and entry."

At the date of the fall of Rouen, moutons were being struck by Charles VI under a Royal Ordinance dated October 21, 1417, which provided that, in order to distinguish them from the previous issue, they should have on the obverse a little cross at the top of the staff bearing the flag, where formerly there was a trefoil, and on the reverse a little cross in one of the angles instead of a fleur-de-lis.

The mouton of the first issue of Henry V described above has a cross at the top of the staff bearing the flag. The leopard takes the place of the cross in one of the angles on the reverse.

After September 25, 1419, all moutons bear an h in the centre of the cross on the reverse (see p. 184). The mouton of the second issue described above fulfils this condition.

The moutons of both the first and the second issues bear a pellet below the 20th letters of the legends. This was the distinguishing mark for the mint of Rouen under Charles VI, and was continued by Henry for some time.

The issue of moutons was discontinued on January 12, 1420, when the écu d'or was issued.

St. Lô was taken by the Duke of Gloucester on March 12, 1418, but the mint was not opened there by Henry until April 14, 1420 (see p. 187). This was subsequent to the issue of the écu d'or.

It is therefore impossible to attribute the moutons under discussion to the mints of Rouen or St. Lô.

Were they struck at some temporary mint before the fall of Rouen? If so, they must have been issued between August 1, 1417, when Henry landed in France (see p. 180), and October 21, 1417, the date when Charles VI altered the type of the French moutons.

These moutons always occur with the distinguishing mark of an annulet below the 1st, 2nd, or 3rd letters of the legends. We have seen that this was the method then used in France for distinguishing the place of mintage. At this date, these distinguishing marks were those in use for the mints of Crémieu, Romans, and Mirabel, in the Dauphiny. It is known that Charles the Dauphin struck moutons at these mints. There are records showing that 12,600 were struck at Crémieu, 17,400 at Romans, and 5000 at Mirabel. It is interesting to note that of these disputed moutons which I have seen, the majority have the annulet under the 2nd letter, and no specimen was known with the annulet under the 3rd letter until 1897, when one was discovered in a hoard of Royal coins in the department of Cher, from which it passed into the collection of M. de Marchéville.

These disputed moutons therefore exactly comply with all the requisites of the moutons struck by Charles the Dauphin at this period at his three mints in the Dauphiny. It is inconceivable to think that Henry

struck them, as M. Adrien de Longpérier seems to imply, at Harfleur in 1415. He was only there from September 22 till October 8. He could not have done so anywhere else on his march from Harfleur to Calais. It is scarcely more probable that he struck them in the early part of his second invasion, as he only sailed for France on August 1, 1417, and did not take Caen until September 4. The moutons of this type are much more numerous than those which Henry undoubtedly struck at Rouen, and I feel convinced that they were not the product of any temporary mint.

I have thought it well to go into this question fully, as these coins have been persistently attributed to Henry, and ought not to be rejected without full consideration.

Ecu d'Or.

This coin was ordered to be struck on January 12, 1420, but no specimen has been found at present. The type was to be as follows:—

Obv.—HENRICVS DEI GRA . FRANCIE . ET . ANGLIE.
A shield bearing the arms of France and England.

Rev.—XPC . VINCIT . XPC . REGNAT . XPC . IMPERAT.
A cross with leopards and fleurs-de-lis in alternate angles. h in centre.

It was to be current for 24 gros, or two francs.

Denier d'Or.

This coin is likewise unknown and was probably never issued. The ordinance, which provides for its issue, is dated May 6, 1420, and states that the types and dies will be sent later. There is, however, no record of the types and dies ever having been sent.

Salute d'Or.

Obv.—✠ ΗΑΗΡ × ΔΕΙ × ΘΡΑ × ΡΑΧ × ΑΗΓΛ × ΗΑΡΕΣ ×
 ΦΡΑΝΚΙ'. Stops, saltires. The Annunciation
 of the Angel Gabriel to the Virgin Mary.
 The Angel is on the l. and the Virgin on the
 r., with a crowned shield bearing the arms of
 France and England quarterly between them,
 surmounted by the word ΑΥΕ on a scroll, to
 which the Angel points; sun and rays above.
 The whole within a beaded inner circle.

Rev.—✠ ΧΡΩ' . ΒΙΗΩΙΤ . ΧΡΩ' . ΡΕΘΗΛΤ . ΧΡΩ' .
 ΙΙΡΕΡΑΤ. Stops, mullets. Cross calvary,
 with fleur-de-lis to l. and leopard passant
 guardant to r.; h below, all within a tressure
 of ten arches with fleurs-de-lis at the angles.
 The whole within a beaded inner circle.

Wt. 60 grs. [Pl. VIII. 4.]

British Museum.

This coin, which is in mint state, was purchased at the Richardson sale (lot 87). Its full weight is 64·4 grains, and it was current for 25 sols tournois. It was struck in pursuance of the ordinance of November 20, 1421.

There is another specimen in the Bibliothèque Nationale, and a third specimen was in the Murdoch Collection (Pl. xi. 385).

Only three specimens were known to de Saulcy, namely, the specimen in the French National Collection, one in the collection of M. Fabre, and one which he states was in the British Museum. He is, however, mistaken in supposing that one was in the British Museum, as no specimen was there before Mr. Richardson's coin was purchased.

From a manuscript in the French National Archives,¹⁴

¹⁴ *Arch. Nationales*, reg. Z 1^b, 3, 8 r^o.

it appears that on March 22, 1423, "it was said of one Johan Marcel, lately master of the mint at Rouen, that his trial boxes of gold had been found of too much alloy. One trial box of December 16, 1421, to January 10, 1423, where there were 104 salutes ordered to be made of fine gold, with $\frac{1}{8}$ karat alloy, was found to be with $\frac{1}{2}$ karat alloy."

This trial box of 104 salutes represents an issue of 20,800 pieces. The salute of Henry V must be meant, as Henry VI did not strike salutes before February 6, 1423. Perhaps the rarity of Henry V's salutes is due to the fact that, as this issue of 20,800 pieces was not up to the standard fineness, they were withdrawn from circulation on the issue by Henry VI of salutes which were up to standard fineness.

The same manuscript also states that during the time that Loys de Cormeilles held the mint of St. Lô, he had made a trial box of gold, from May 22, 1422, to October 26, 1422, containing 12 salutes, which were $\frac{1}{4}$ karat below standard fineness. This represents an issue of 2400 of these salutes at the St. Lô Mint.

Demi-salute d'Or.

This coin was ordered to be issued at the same date as the salute d'or, but no specimen has as yet been met with.

SILVER COINAGE.

Gros.

First Issue. January 19, 1419–September 25, 1419.

Rouen.

1. *Obv.*—✠ HENRIQVS : FRANQORV : REX. Stops, pellets; pellet under the V of FRANQORV (16th letter). Three fleurs-de-lis surmounted by a crown, within a plain inner circle.

Rev.—✠SIT : NOMA : DNI : BANADICTV. Stops, pellets. Cross fleur-de-lisée, crown in 1st quarter, leopard passant to l. in 4th quarter.
Wt. 45·7 grs. [Pl. VIII. 5.]

My Collection.

This coin was also known as the florette, or royal. Its full weight was 50·8 grains, and it was current for 20 deniers tournois. The English noble was current for 48 gros, and the franc for 12 gros. It is quite common.

Under Charles VI, the mint-mark was a pellet under the 15th letter of the legends, that is, under the v of FRANQORV in the legend KAROLVS FRANQORV REX. These gros were struck by Henry immediately after his capture of Rouen, and the moneyers continued to place the mint-mark under the v, oblivious of the fact that HENRIQVS had one more letter in it than KAROLVS, and that the v was consequently the 16th letter.

2. As No. 1, but a pellet between two of the fleurs-de-lis on the obverse, and below the D of BANADICTV (15th letter) on the reverse.

Wt. 43·7 grs.

British Museum.

Second Issue. January 12, 1420–May 6, 1420.

Rouen.

Obv.—✠HENRIQVS : FRANQORV : REX. Stops, pellets; pellet under v of FRANQORV. Three fleurs-de-lis surmounted by a crown and supported by a leopard rampant on either side; the whole within a plain inner circle.

Rev.—✠SIT : NOMA : DNI : BANADICTV. Stops, pellets; pellet under the D of BANADICTV. Cross fleur-de-lisée, crown in 1st quarter, leopard passant to l. in 4th quarter; h in centre of cross; the whole within a plain inner circle.

Wt. 47·7 grs. [Pl. VIII. 6.]

British Museum.

This coin is fairly common. Its full weight is the same as that of the previous issue, and it was current for the same amount.

St. Lô.

The mint at St. Lô was not opened until April 14, 1420. The gros of this issue was ordered to be struck there on April 18. The mint-mark was to be a pellet under the 2nd letters of the legends. Probably at this date, too, the mint-mark of Rouen was altered to a pellet under the 1st letters of the legends. The Treaty of Troyes was on the point of being signed, and Henry probably then decided on these mint-marks to designate the 1st and 2nd mints of the Duchy of Normandy.

I have not met with any gros of this issue of the St. Lô Mint.

Third Issue. May 6, 1420—June 16, 1420.

Rouen.

Obv.—✠ h : REX : ANGLIA : Z : HERES : FRANCIA.
Stops, pellets; pellet under 1st letter of legend. Leopard passant guardant to l., two fleurs-de-lis with pellet between them above, one fleur-de-lis below; the whole surmounted by a crown and within a plain inner circle.

Rev.—✠ SIT : ROMAN : DOMINI : BENEDICTVM.
Stops, pellets; pellet under 1st letter of legend. Cross fleur-de-lisée, with h in quatrefoil compartment in centre; the whole within a plain inner circle.

Wt. 42·9 grs. [Pl. VIII. 7.]

British Museum.

This gros must be the coin struck in accordance with the ordinance of May 6, 1420, although it bears the title of "Heres Francie" and the Treaty of Troyes was not signed until May 21, 1420. It cannot be assigned to any subsequent issue, and the negotiations for the treaty

would have been sufficiently advanced to enable the dies with the new titles to be prepared. It is also an extremely rare coin, and it will be noticed that this issue was very soon superseded.

Its full weight is 47·1 grains, a slight reduction from the previous issue. It was current for the same amount.

It will be noticed that the mint-mark has been altered to a pellet below the 1st letters of the legends.

There is another specimen in the Bibliothèque Nationale, and one was sold at the Murdoch sale (Pl. xi. 395), which had been successively in the Henderson, Dimsdale, Thomas, Sparkes, Wigan, Marsham, and Richardson collections.

St. Lô.

Same legends and type as the gros of Rouen, but pellets under the 2nd letters of the legends on obverse and reverse. The workmanship is not so good as that of the Rouen coin.

Wt. 39·5 grs. (pierced). British Museum.

Fourth Issue. June 16, 1420–November 20, 1421.

Rouen.

Obv.—m.m. leopard. h : REX : ANGLIA : Z : HÆRÆS :
FRANCIÆ. Stops, pellets; annulet under 1st
letter of legend. Type exactly similar to
gros of 2nd Issue.

Rev.—m.m. leopard. SIT : NOMA : DNI : BENEDICTV.
Stops, pellets; annulet under 1st letter of
legend. Type exactly similar to gros of
second issue.

Wt. 32 grs. [Pl. VIII. 8.]

My Collection.

The full weight of this coin was 40·6 grains, a considerable reduction from the former issues. It was current for the same amount. It is identical with the coins of the second issue, with the exception of the legend,

altered in conformity with the Treaty of Troyes and the new mint-mark for Rouen. The leopard, too, takes the place of the cross at the beginning of the legends.

This gros is fairly common.

St. Lô.

The ordinance of June 16, 1420, which provides for the issue of this gros was also addressed to the Mint at St. Lô, but I have not come across any gros of this issue bearing the St. Lô mint-mark.

Demi-gros, or Guénar.

First issue. September, 1417 (?).

Caen.

Obv.—✠ HENRICVS DI G FRANCORV REX. Stops, annulets enclosing pellets. Shield bearing the arms of France, pellet between the two top fleurs-de-lis. The whole within a plain inner circle.

Rev.—✠ SIT NOMVS DNI BENEDICTV. Stops, annulets enclosing pellets; sun below the cross. Plain cross pattée with fleur-de-lis in 1st and 4th angles and crown in 2nd and 3rd angles; the whole within a plain inner circle.

Wt. 41 grains. [Pl. VIII. 9.]

My Collection.

From the Hazlitt Collection (Pl. xv. 1185).

This is an extremely rare and very interesting coin. M. de Saulcy describes a specimen in the collection of M. Gariel, weighing 40·8 grains, and there is a specimen in the Bibliothèque Nationale weighing 45·8 grains. M. de Saulcy states that there was a specimen in the collection of M. Fabre, but as the French National Collection did not possess a specimen at the date of his book, it is possible that these are the same coin. M. de Saulcy thought that the British Museum possessed a specimen, but that is not the case.

He also states that some years prior to 1878 an enormous find of demi-gros, or blancs of 10 deniers tournois, of Charles VI was carefully examined by M. Quandale, and that it furnished three or four specimens at most of a demi-gros of Henry V previously unknown. They promptly passed into public and private collections, and since then no more have been found.

To what date are we to assign the issue of this demi-gros? This subject has been dealt with by M. le Comte de Castellane in an article in the *Revue Numismatique Française* for 1895 (pp. 557 ff.). He considers that this coin was struck at Caen for the following reasons:—

On January 19, 1419, Henry completed his conquest of Normandy by the capture of Rouen. He immediately ordered the issue of moutons and gros of the types and in the manner in which they had been struck before his conquest. At that date the coins of Charles VI were issued there under the ordinance of October 21, 1417, and the silver “étaient ouvrées sur le pied 60°.”

On September 25, 1419, Henry continues this issue and completes it by striking demi-gros, quarts de gros, doubles tournois and deniers, and orders that all these coins, moutons, gros, demi-gros, quarts de gros, mansois (doubles tournois), and deniers should have an h in the centre of the cross on the reverse.

This coin cannot, therefore, have been struck at Rouen, as it bears no h. Still less can it have been struck at St. Lô, where the mint was not opened until April, 1420.

A manuscript¹⁵ preserved in the Bibliothèque Nationale contains the following entry:—

¹⁵ Ms. Fr. 5920.

“Blans fais à Caen, au soleil au bout de la croix * sont à 3d. 16gr.”

Henry invaded Normandy on August 1, 1417. He took Caen on September 4 following. At that date the French regal coins were struck under the ordinance of May 10, 1417, and the silver coins “étaient frappées sur le pied 40^e.” That is the “titre” of this coin.

If Henry struck coins for his troops at Caen immediately, he would probably have followed the type and weight of those then current there. This demi-gros is of a pure French type, without any modification whatever.

This coin was, therefore, probably struck at Caen in September, 1417, immediately after its capture by Henry, and is the first piece issued by him in France.

I think we may accept the Comte de Castellane's reasoning. It will be recollected that the type of the quart de gros ordered to be issued by the ordinance of September 25, 1419, was to be “similar to that of the demi-gros.” The quart de gros struck in pursuance of that ordinance is similar in type to this demi-gros, but with two very important modifications. The first is, that it bears an *h* in the centre as ordered by the ordinance, and the second is that in two of the angles on the reverse are a crown and a leopard, and the other two angles are empty.

It might be argued that this demi-gros was struck at Rouen before September 25, 1419, but if this were the case, we should expect to find the crown and leopard in the angles of the reverse, as on the quart de gros, whereas we have two fleurs-de-lis and two crowns. The gros struck before September 25, 1419, also has

a crown and a leopard in the angles of the reverse, which is an additional reason for expecting the same on any demi-gros struck during that period.

The weight, too, is against the argument that this demi-gros was issued at the same period as the first issue of gros. The full weight of the gros was 50·8 grains. The full weight of this demi-gros must have been very nearly as much.

I think, therefore, that the evidence is in favour of this coin having been issued at Caen in September, 1417. It cannot have been struck at Rouen after September 19, 1419, and it does not correspond with the gros struck there before that date. On the other hand, it does correspond with the French regal demi-gros struck at Caen at the date of Henry's capture of that town.

Second Issue. May 6, 1420–June 16, 1420.

The ordinance of May 6, 1420, which provided for the issue of the gros of the third issue (see p. 203) at Rouen and St. Lô, also provided for an issue of demi-gros current for 10 deniers tournois and weighing 23·5 grains. They were to be struck in the proportion of one to every two gros. Only very few specimens of the gros are known, and the demi-gros has not yet been discovered.

Quart de Gros.

Obv.—✠ HENRICVS · FRANCORV · REX. Stops, pellets. Shield bearing the arms of France within beaded inner circle.

Rev.—✠ SIT · NOMA · DNI · BENEDICTV. Stops, pellets. Cross pattée, h in centre, within beaded inner circle; crown in 1st quarter, leopard passant in 4th quarter.

Wt. 23·4 grs. Renault Collection (?).

This coin was struck in pursuance of the ordinance of September 25, 1419. It is unique, and was published by Poey d'Avant (Pl. lxxviii, 16), who states that it was found in Normandy and that it was in the Museum of Avranches. M. Renault communicated it to him. M. de Saulcy states that he was unable to find it in the Museum at Avranches, and assumes that it must be in the private collection of M. Renault.

The full weight of the coin is 25·39 grains, and it was struck at the rate of 160 to the mark. It was current for 5 deniers tournois.

Mansois, or Double Tournois.

First Issue. September 25, 1419.

1. *Obv.*—✠ HENRICVS · FRANQORV REX. Stop, pellet; annulet under the S of HENRICVS. Three fleurs-de-lis within an inner circle.

Rev.—MON | ETX | DVP | LEX | . Cross pattée, each limb terminated by a fleur-de-lis, which pierces an inner circle and divides the legend. An H within a circular compartment in the centre of the cross.

M. le Chevalier d'Achon's Collection.

2. As No. 1, but the obverse legend ends RE.

M. le Chevalier d'Achon's Collection.

This coin was unknown to de Saulcy and was published by M. le Chevalier d'Achon in the *Gazette Numismatique Française* for 1897 (p. 299). The author states that, some years previous to that date, he had obtained five specimens of the coin from a find in Normandy. They are all badly engraved and struck, and on none are the legends complete, but they show the two varieties described above. On the first, the cross on the obverse at the

commencement of the legend is very thin ; and on the second the x is omitted from the word REX, both faults being due to lack of space.

The five examples weigh together 71·87 grains, an average of 14·37 grains. The full weight was 20·31 grains, or 200 to the mark.

The mansois was current for two deniers tournois, that is, the same as the coin usually known as the Double Tournois. M. le Comte de Castellane makes some interesting remarks on the use of the term *mansois* in his article on the denier tournois of September 25, 1419, cited below (p. 212). He tells us that during the feudal period a denier of the coinage issued by the Counts of Maine was worth two deniers of Anjou or two deniers tournois, their equivalent. Consequently, one could say that a denier of Maine, or *mansois*, was in fact a double tournois. Although in 1419, the coinage of money in Maine had been stopped for a long time, one sees the tradition preserved intact. The ordinance of September 25, in fact, employs most judiciously the word *mansois* to indicate a double tournois, while it terms a *petit denier* the coin which was to be current for one denier tournois.

Second Issue. November 20, 1421.

Rouen.

1. *Obv.*—† R : REX : ANGL : HÆRÆS : FRANK. Stops, pellets ; pellet under 1st letter of legend. Leopard, crowned, passant guardant to l., fleur-de-lis above ; the whole within a beaded inner circle.

Rev.—† SIT : NOMA : DNI : BENEDEICTV. Stops, pellets ; pellet under first letter of legend.

Cross pattée, h within a quatrefoil compartment in centre; the whole within a beaded inner circle.

Wt. 31·5 grs. [Pl. VIII. 10.]

My Collection.

The full weight of this coin was 36·08 grains and it was current for two deniers tournois. It is quite common.

2. *Obv.*—R̄EX : ANGL : h̄AR̄ES : FR̄AN̄QOR. Type as last.

Rev.—As last.

Wt. 35·1 grs. M. de Saulcy's Collection.

I have a specimen in my collection with this curious obverse legend.

St. Lô.

Obv.—✠ h̄ : R̄EX : ANGL : h̄AR̄ES : FR̄AN̄Q. Stops, pellets; pellet under 2nd letter of legend. Type as last.

Rev.—✠ S̄IT : NOM̄A : DN̄I : B̄AN̄AD̄IATV. Stops, pellets; pellet under 2nd letter of legend. Type as last.

Wt. 33 grs.

British Museum.

Petit Denier, or Denier Tournois.

First Issue. September 25, 1419.

Obv.—✠ h̄ENR̄IQVS ◦ R̄EX. Stop, annulet. Two fleurs-de-lis within an inner circle.

Rev.—✠ TVRON̄VS ◦ Q̄IVIS. Stop, annulet; annulet under the S of TVRON̄VS. Cross pattée, with h̄ within a circular compartment in the centre, within an inner circle.

Wt. 10·6 grs.

M. le Chevalier d'Achon's Collection.

This coin, which was unknown to M. de Saulcy, was

published by M. le Comte de Castellane in the *Gazette Numismatique Française* for 1902 (p. 121). It was found in Normandy some years previous to that date.

The full weight was 13·5 grains, or 300 to the mark. It was current for one denier tournois.

Second Issue. November 20, 1421.

Rouen.

Obv.—✠ HENRICVS · REX. Stop, pellet; pellet under 1st letter of legend. Leopard, crowned, passant guardant, to l., within beaded inner circle.

Rev.—o TVR | ONV | S AI | VIS | . Annulet at beginning of legend, pellet under 1st letter. Long cross extending to edge of coin, h in centre; beaded inner circle.

Wt. 13·8 grs.

My Collection.

The full weight of this coin was 18 grains, or 225 to the mark. It is fairly common.

St. Lô.

Obv.—✠ HENRICVS · REX. Stop, annulet; pellet under 2nd letter of legend. Type as last.

Rev.—o TVR | ONV | S AI | VIS. Annulet enclosing pellet at beginning of legend; pellet under 2nd letter. Long cross pattée with h in centre as on last; plain inner circle.

Wt. 15 grs. [Pl. VIII. 11.]

My Collection.

LIONEL M. HEWLETT.

(To be continued.)

XI.

THE QUARTER-ANGEL OF JAMES I.



THROUGH the liberality of Mr. Alexander Mann, the British Museum has recently acquired a very remarkable piece belonging to the English coinage. It is a quarter-angel of James I, the existence of which till a short time ago was unknown to numismatists. The coin was purchased by Mr. Mann at a sale, which took place at the rooms of Messrs. Sotheby, Wilkinson & Hodge, on Monday, November 14, 1910 (lot 64). It had been the property of Mr. John Ellman Brown, who had formed a small and miscellaneous collection of Greek, Roman, Anglo-Saxon, and English coins and medals. It is very strange that this piece, which is at present unique, should have been hidden away amongst a number of coins of no particular interest. The owner, judging by the rest of his collection, probably picked it up by chance and never realized its importance.

This coin, of which a figure is given above, may be described as follows :—

Obv.—The Archangel, St. Michael, standing to front with his r. foot on the Dragon, into whose jaws he thrusts his spear. *Leg.* IACOBVS · D' · G' · AN' · SC' · FR' · ET · HI' · REX ; m.m. lis.

Rev.—The royal shield quarterly : 1 and 4, England and France ; 2, Scotland ; 3, Ireland. *Leg.* TVEATVR · VNITA · DEVS ; m.m. lis.

AJ. Size, .7 in. Wt. 19·6 grs.

The inscription on the obverse, which gives the titles of King of England, Scotland, France, and Ireland, at once identifies this coin with the first issues of James I, as on October 20, 1604, he assumed the titles of King of Great Britain, France, and Ireland, and ordered that this style should be used upon all his coins. This quarter-angel was, therefore, struck at some time between March 24, 1602, '3, the date of James's accession to the throne of England, and October 20 of the following year, a period of one year and seven months ; but, as we shall see, it will be possible to reduce very considerably the actual time during which this coin was struck.

On May 20, 1603, the King renewed the indentures with Sir Richard Martin and his son Richard as master and worker of the Mint, which had previously been made with them by Elizabeth on September 28 in the one and fortieth year of her reign (1599). This appointment was for the period of their natural lives, with remainder to the survivor. Under the terms of these indentures, Sir Richard Martin and his son were ordered to "make and coyne of such gold as shall be delivered to them for that purpose three manner of moneys of gold ; that is to say, one piece thereof to be called the Angel running for ten shillings of which three score and thirteen should go to every lb. weight of Troy ; and one other piece, which

shall be called the Angelet, half of the Angel, running for five shillings, of which one hundred and forty-six should go to every lb. weight of Troy; and the third piece which shall be called the quarter-angel, running for two shillings and sixpence, of which two hundred four score and twelve should go to the lb. weight of Troy. Further it was ordered that every pound weight of Troy of these monies of gold should hold their number and be in value thirty-six Pounds and ten shillings of sterling and shall be in fineness at the co-mixture melting down and casting out of the same into Ingots twenty and three carats three grains and a half of fine gold, and half a grain of alloy to the pound weight of Troy, which twenty-three carats three grains and a half of fine gold and half a grain of alloy is the old right standard of the moneys of gold in England." The other gold coins which were ordered to be made under these indentures were the sovereign, half-sovereign, crown or quarter-sovereign, and half-crown or eighth-sovereign. These were, however, to be of crown gold, which contained 22 carats of fine gold and 2 carats of alloy.

These standard gold coins were the same as were ordered by indenture in the forty-third year (1601) of Elizabeth. They were to be of the same current values also; the only variations being that the title of King of Scotland was to be added to the royal style and the arms of Scotland were to be placed in the second quarter of the shield, and those of Ireland, which now appeared for the first time upon the money, in the third quarter.

The fact that none of these angels and their parts were known to exist at the present time led to the supposition that the part of the indenture to Sir Richard Martin and his son relating to the angel gold had never

been carried out; and as no diligent search had so far been made amongst the public records and those at the mint, Kenyon¹ says, "this first coinage (*i.e.* of James I) consisted of sovereigns, half-sovereigns, crowns and half-crowns, all of which have for mint-mark the Scottish thistle. They were made of 'crown' gold and are all rare."

Having supplied the details of the orders and indentures under which these angel gold coins were to be struck, we will now see if we have any further evidence of their actual issue, for it is only the smallest of the three denominations which is at present known to us.

Omitting all reference to the silver money for the sake of brevity, it may help if I give in as few words as possible the chief events relating to the gold currency subsequent to the indentures of May 21, 1603, appointing Sir Richard Martin and his son master and worker at the Mint, down to June, 1605.

June 7, 1603.—Trial of the pyx in the Star Chamber of Elizabethan gold coins with m.m. 2, comprising angels, halves, and quarters in fine standard, and twenty shillings, ten shillings, five shillings and half-crowns in the crown standard (22 carats).

March 13, 1604.—The King and Queen shortly after their coronation visited the Mint and struck coins for distribution.

May 22, 1604.—Trial of the pyx, comprising gold coins in the crown standard only of the four denominations, with the mint-mark thistle, weighing $33\frac{1}{2}$ sovereigns to the pound.

October 20, 1604.—James assumes the title of King of Great Britain, &c.

¹ *Gold Coins of England*, p. 135.

November 11, 1604.—A new indenture is made with Sir Richard Martin and his son, Richard, to coin gold of the crown standard at the rate of £37 4s. to the pound by tale.

November 16, 1604.—A proclamation is issued specifying the new designs adopted for the coins under the new indenture.

June 20, 1605.—Trial of a double pyx is held; the first was of coins of the fine and of the crown standard, comprising pieces of all denominations struck under the indenture of May 21, 1603, and bearing the mint-mark "flower de luce." The second was of coins in crown gold only struck under the indenture of November 11, 1604. These also had the "flower de luce" mint-mark.

From the above synopsis it will be seen: (1) that the trial of the pyx which took place on June 7, 1603, was connected entirely with the gold coins of Elizabeth, and included pieces of the two standards of gold, fine gold and crown gold; (2) that on March 13, 1604, the King and Queen visited the Mint and struck coins for distribution; (3) that again on May 22, 1604, a trial of the pyx occurred, but the coins submitted for trial were of crown gold only, and that no angels or parts were included, consequently we may conclude that none had been issued up to that date. These coins all bore the mint-mark, a thistle, which was on that occasion changed to the "flower de luce," a very important point in connexion with the quarter-angel under consideration; (4) that on October 20 of the same year James assumed the title of King of Great Britain; (5) that on November 11 following Sir Richard Martin and his son were ordered to strike coins of the crown standard gold only, the types of which were announced by proclamation five

days later, on November 16; and (6) that on June 20, 1605, at a trial of a double pyx, the coins of fine gold included only those that were struck under the indenture of May 21, 1603, bearing the mint-mark, a "flower de luce"; but that the coins of crown gold were those issued under the indenture of November 11, 1604, also bearing the mint-mark, a "flower de luce."

Taking these circumstances in connexion with the quarter-angel now described for the first time, we can fix its issue within a very narrow limit not exceeding six months; that is, between May 22, 1604, and the following October 20. For our present purpose we need only take the obverse legend and type. Here we have the titles of King of England, Scotland, France, and Ireland which were used on all the coins from James's accession till October 20, 1604, when, as we have seen, James assumed those of King of Great Britain, France, and Ireland. This therefore puts the issue of our coin previous to that date; but we are able to reduce this period very considerably, for the mint-mark on it is a "flower de luce," which as mentioned above, was adopted for the coinage instead of the thistle mint-mark on May 22, 1604; so that its issue must have occurred at some time between that date and October 20 of the same year, a period of five months.

We can now turn our attention to the type of the reverse, which is of a most unusual character. The obverse type, the Archangel St. Michael and the Dragon, was the original design for the angel and its parts, and it remained so throughout their issue, since its institution by Edward IV, and that of the reverse, a ship bearing a shield, with the royal arms surmounted by a cross. The legend on the obverse was always the name of the sovereign and

his or her titles; but that on the reverse underwent considerable variation. These we need not notice except to mention that Mary adopted for her angels and half-angels the legend, "*A domino factum est istud et est mirabile*," more or less abbreviated. Elizabeth followed her sister's example, but on her quarter-angel completed her titles "*Et Hibernie Regina Fidei*." On the present coin this stereotyped design is abandoned, and we have in its place a plain royal shield and the legend "*Tueatur unita Deus*." This design and legend are mere adaptations from other coins. The shield is the same as that which occurs on the twopence of James I of his first coinage bearing the mint-marks, a thistle or a lis; and the legend is taken from the quarter-sovereign, which is of the same date and issues. As compared with that of the obverse the workmanship of the reverse is very inferior, almost rude, and it gives one the impression that the die was hurriedly made and for a particular purpose or occasion. To account for this it has been suggested that perhaps the angel and its parts were struck either on the occasion of the King's coronation or on that of his visit with the Queen to the Mint on March 13, 1604; but the presence of the mint-mark, a "flower de luce," together with the absence of any specimens from the trial of the Pyx on May 22, 1604, renders this suggestion absolutely impossible.

From the evidence of this quarter-angel and also from that of contemporary documents, it may be taken as a certainty that some time during 1604 the angel and the half-angel were also struck; but their non-existence, so far as we are at present aware, and the great rarity of the quarter-angel, would suggest that the coinage was a very limited one. On this point also we are not without some

information; for Mr. Hocking tells me that in a contemporary manuscript at the Mint, which specifies the amount coined in annual periods ending March 31, he finds that 36 lbs. of Angel coin was struck in 1603-4² and 9 lbs. in 1604-5, making 45 lbs. in all. The custom was to set aside for the trial of the pyx one coin out of each journey-weight (15 lbs.) of gold pieces, and the fine gold coins found in the pyx on June 20, 1605, amounted in all to 17s. 6d.—that is to say, one angel, one half-angel, and one quarter-angel—the three pieces corresponding in number with what would be selected in the ordinary way from 45 lbs. of metal. From this there appears to have been coined 15 lbs. of metal of each denomination; which according to the information supplied in the indenture of May 21, 1603, re-appointing Sir Richard Martin and his son Richard master and worker of the moneys, would produce 1095 angels, 2190 half-angels, and 4380 quarter-angels. Of all this number at present we know of only one specimen, and that of the smallest denomination.

It seems impossible to account for the almost entire disappearance of this issue. Mr. Hocking has, however, suggested to me that it might have been caused by the various proclamations for the substantial reduction in weight of the coinages which were occasioned by the desirability to correlate the English and Scottish moneys or by way of the prevention of the prevalent practice of culling out, melting, and transporting out of the country the heavy coins. This known practice, coupled with the fact of the short time that the coinage was in progress,

² This date suggests that angel money with the mint-mark, a thistle, though not known to exist, may also have been struck.

might be sufficient to account for the practical disappearance of this issue. We know, however, that the quarter-angel of James I was still in currency during the reign of Charles I; for there are in the National Collection two specimens of a coin-weight, which were recently presented by Dr. Parkes Weber, and which have on the obverse a representation of St. Michael and the Dragon with the name of James I, and on the reverse the marks of value 11S 1XD and the letter B, showing that they were made by Nicholas Briot.³ Being somewhat worn these weights are each one grain under their full weight, viz. 18·6 grains instead of 19·6 grains. It may also be noted that in a proclamation by Charles II dated August 26, 1661, raising the value of the current coins, the half-angel and the quarter-angel are named with the heavy angel; but the light angel is mentioned without its fractions, from the circumstance that the last were never issued. When James reduced the weight of the angel in 1619 he did not continue the half-angels or quarter-angels, nor did Charles I issue either of the smaller denominations. The proclamation of Charles II, therefore, shows that the existence of the quarter-angel was recognized so late as 1661.

These quarter-angels besides referring to those of James I may also have related to similar pieces of

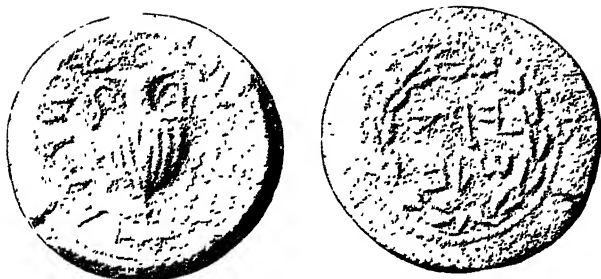
³ In 1612 the current value of the angel was raised to 11s., so that the quarter-angel was worth 2s. 9d. In 1619 the weight of the angel was reduced and made current for 10s. This last piece is known as the light angel. These coin-weights no doubt belong to the series which were ordered by proclamation December 20, 1632. They were ordered to be of a circular form and to bear certain marks by which they might easily be known from the weights which were formerly used. Nicholas Briot who made the dies for them was appointed chief engraver to the Mint in the following year.—Ruding, *Annals of the Coinage*, vol. i. p. 386.

Henry VIII and Elizabeth, who were the only other sovereigns to strike this denomination. There were no further issues, therefore, of the quarter-angel after 1604. The angel was resumed by James in 1605; but the half-angel was not reproduced till 1610. Charles I struck only angels, and not later than 1634.

I cannot close this brief account of the newly discovered quarter-angel of James I without expressing my special thanks to Mr. Hocking who has supplied me with most of the facts connected with its issue. Mr. Hocking's knowledge of the records of the Mint is unfathomable, and this knowledge is so frequently placed at the disposal of others that they often obtain the credit which is really due to him.

H. A. GRUEBER.

MISCELLANEA.



A RARE JEWISH COIN.

COLLECTORS of Jewish coins are familiar with the rare large brass pieces issued during the second and last revolt of the Holy Nation against the Romans.

The general description is as follows:—

Obv.—Laurel-wreath joined by jewel; border of dots.

Rev.—Two-handled vase; border of dots.

Æ₁.

Vide Madden, *Coins of the Jews*, p. 203, 87 (wrongly attributed to the first revolt), and p. 244, 39.

The former reads, on the obverse, within the wreath in three lines—

שמואל
נשיא
ישראל

שמואל
נשיא
ישראל

that is, "Simon Nasi (¹ Prince) of Israel;" and around the type on the reverse—

L F q w z X L F 7 L X θ F X ז א
 ישראל לגאלה אחת שנת

that is, "First Year of the Redemption of Israel."

The latter reads on the obverse, within the wreath, the single word—

ש מ ש מ
 ע ו ע ו

that is "Simon;" and on the reverse, around the type—

L F q w z q θ L ש פ
 ישראל לחר שב

חר undoubtedly stands for לחרות and would read, "Year two of the Deliverance of Israel."

Judging from the analogy of the rest of the coinage, both silver and copper, these coins should be overstruck, but extant specimens show no traces of overstriking. The weight appears to vary from 568 grains to 390 grains. Roman sestertii of Vespasian or Titus or even Trajan might thus have been used.

I have before me now a new type from a recent find, which has not been previously published in England.

The reverse reads within the wreath—

ז q z י ר
 ש ל ש ל

that is "Jerusalem."

It shows two dates. Of the first year a specimen has lately been acquired by the British Museum.

The obverse reads around the two-handed vase—

L F q w z X L F 7 L X θ F X ז א

This is like the first coin illustrated by Madden, and it obviously belongs to the first year of the revolt, viz. 132 A.D.

The piece of the second year, which I have in my collection, is similar to the British Museum specimen illustrated above, and reads—

L F q w z q θ L ש פ

This is like the second coin in Madden, and would be of the year 133 A.D.

I suggest that the former was struck after the Nasi piece. Simon and Eleazar began the revolt together. Eleazar on his coins styles himself "priest," אלעזר הכהן. Simon might well style himself נשיא, "Prince." After his quarrel with Eleazar, he might then strike the Jerusalem pieces and be emboldened at the end of the second year, as his influence grew stronger, to substitute his own name without any modifying title, שמעון.

It will be instructive to find a large copper of this or similar type undated to make a parallel with the tetradrachm of the revolt.

The denomination appears to be that of the Roman sestertius, though both the specimens which I possess are lighter than Roman first brass, against which I have weighed them, while Madden's weight of 568 grains seems impossibly heavy.

EDGAR ROGERS.

ROMAN COINS FROM ANGLESEY.

THE following small find of Roman Republican and Imperial coins, which I have been allowed by the kindness of Lady Reade to examine, is perhaps worth putting on record. They were found together, all in one spot, while the foundations of "Western Heights" were being dug in the field called "Parc Stryd," Llanfaethlu, Anglesey, North Wales, some time in the seventies. In the lower part of the same field, I am informed by Lady Reade, are still to be seen the remains of a long trench, which could have served no agricultural purpose; this and the name "stryd" may point, like the coins, to Roman occupation.

The coins are for the most part in rather bad condition; but the latest issues (such as those of Domitian) owe their state rather to corrosion or external deposit than to wear. It is probable, therefore, that the little hoard was buried not very long after A.D. 87, the date of issue of the latest coins.

The reduction of Anglesey was one of the first undertakings of Agricola, and was completed by A.D. 80. This hoard may have belonged to one of his soldiers; but it is just as likely, considering that it contains old coins of the kind which circulated in Britain among the natives long after they had gone out of use in more civilized parts of the Empire, to have been a native's treasure.

G. F. H.

No.	Description.	Denomina- tion.	References	Approx date	
1	P. Paetus	Denarius	Grueber, I. 120. 877	^{B.C.} 150-125	1
2	M. Baebius Q. F. Tampilus	"	Grueber, I. 133. 935	150-125	1
3	Manius Fonteius (ctmk. M on obv.)	"	Grueber, I. 194. 1228	91	1
4	L. Piso Frugi (symbol, bird; details obscure)	"	Grueber, I. 254 ff.	88	1
5	C. Vibius C. F. Pansa	"	Grueber, I. 289. 2238 f.	87	1
6	" "	"	Grueber, I. 290. 2244 f.	"	1
7	L. Titurius	"	Grueber, I. 297. 2322	87	1
8	M. Plaetorius M. F. Cestianus (ctmk. V)	"	Grueber, I. 441. 3596	67	1
9	A. Plautius	"	Grueber, I. 490. 3916	54	1
10	L. Plautius Plancus	"	Grueber, I. 516. 4004	47	1
11	L. Flaminius (ctmk. O)	"	Grueber, I. 566. 4201	43	1
	M. Antonius (legionary coins—				
12	LEG III	"	Grueber, II. 528. 193	31-30	1
13	" X (ctmk. L)	"	Grueber, II. 529. 202		1
14	" XI	"	Grueber, II. 529. 203		1
15-17	illegible; one ctmk. S, another C X	"	Grueber, II. 528 ff.		3
18	Octavian (triumphal arch, IMP CAESAR)	"	Grueber, II. 14. 4348	29-27	1
19	Octavian (Scarpus)	"	Grueber, II. 585. 6	29-27	1
20	" (Aegypto capta)	"	Grueber, II. 537. 245	28	1
21	Augustus (IMP. XIII)	"	Grueber, II. 442. 216	8-5	1
22	" (Caius and Lucius Caesares)	"	Cohen, I. 69. 43	2	1
23-24	Tiberius (Pontif. Maxim.) (of one the rev. only is preserved; possibly the shell of a contemporary forgery)	"	Cohen, I. 191. 16	^{A.D.} 15	2
25	Nero (Iuppiter custos)	"	Cohen, I. 288. 123	—	1
26	" (Victory)	as or dupondius	Cohen, I. 299. 303 or 304	—	1

No.	Description.	Denomina- tion.	References.	Approx. date.	
27	Vitellius (Concordia P. R.)	Denarius	Cohen, I. 357. 21	A.D. —	1
28	Vespasian (Cos IIII; Augur	"	Cohen, I.	72 or 73	2
29	Tri. Pot.)		371. 45		
30	Vespasian (Ceres August.)	"	Cohen, I. 372. 54	—	1
31	" (Eagle)	as or dupondius	Cohen, I. 404. 480- 484	—	1
32	Titus (Tr. p. IX, imp. XV, cos VIII.)	Denarius	Cohen, I. 454. 309	80	1
33	Domitian (Cos V)	"	Cohen, I. 474. 49	76	1
34	Domitian (Tr. pot. II, cos VIII, des. X)	"	Cohen, I. 520. 601	83	1
35	Domitian (Cos XII. Cens. Per.)	sestertius	Cohen, I. 497. 310	86	1
36	Domitian (Cos XII. Cens. Per.)	as or dupondius	Cohen, I. 481. 111	86	1
37	Domitian (Cos XII. Cens. Per.; Moneta Augusti)	"	Cohen, I. 499. 327. var.	86	1
38	Domitian (Cos XIII. Cens. Per.)	"	Cohen, I. 481. 125	87	1
39	Domitian (Cos XIII. Cens. Per.)	"	Cohen, I. 481. 126	87	1
					89

NOTICES OF RECENT PUBLICATIONS.

Die antiken Münzen Nord-Griechenlands, Bd. II.: *Thrakien*.
Bearb. v. F. Münzer u. Max L. Strack. Erster Teil,
Heft I. Berlin. 1912.

THIS first fascicule of the first part of the second volume of the Berlin Corpus is the work of Professor Strack, who has been especially assisted by Dr. von Fritze. It contains the coins of the Thracians (with Ἡρακλέους Σωτήρος) and of the three cities of Abdera, Ainos, and Anchialos: 690 coins, described in 308 pages, with 8 admirable plates. The distinguished quality of the work that is being put into these volumes is so well known that it is unnecessary to dwell upon it. As regards the method, it is to be noted that certain subtleties, which were introduced in recent parts, such as the attempt to reconstruct the dies, have been discarded, the

author considering that the results thus attained do not justify the trouble. I would suggest that discretion might have been used, and that in the fine artistic series, such as those of Abdera and Ainos, the evidence of the dies is worth having; also the relative positions of the obverse and reverse dies are worth noting. The introductions to the various mints are valuable studies of the economic, historical, and geographical problems connected with the coinage.

A comparison with the British Museum Collection has revealed one or two minutiae which may be worth putting on record.

Abdera. 78, No. 8, and 86, No. 2, are now in the British Museum. 158 is only a specimen on which the magistrate's name has been obliterated; traces of letters are visible, but cannot be read. 164: a variety has a star (?) as symbol in the right-hand bottom corner of the linear square. 246: a new specimen reads certainly ΤΙΤΩ. 247: a new specimen reads ΟΥΕΘΠΑΙΑΝΟ | ΑΥΤΟ | ΚΡΑΤΟΡΙ and ΔΟΜΕΤΙΑΝΩΚΑΙΠΑΙΑΒΔΗΡΕΙ | ΤΑΙ. 250: a new specimen reads ΓΕΡΜΑ; do the others also? 252: a new specimen has ΑΔΡΙΑΝΟΚΑΙΠΑΙ. The British Museum has also recently acquired specimens of Nos. 242, 244, and 249.

Ainos. 279: Is Pan really ἀποσκοπεῖν? His l. hand is nowhere near his head. The British Museum acquired a specimen of this in 1907. 302: The British Museum specimen shows an olive rather than a laurel branch; the tree is different from that illustrated in Pl. iv. 27. 337: "beiden Falschen" should have been added after the word London. An interesting coin, apparently not in the Corpus, was acquired in 1908:

Obv.—Head of Apollo r., laureate, of good style.

Rev.—Forepart of goat standing r., between Α [I]

N I

Q N

Æ. 13 mm. Wt. 42.6 grs. (2.76 grm.).

The head is possibly meant for the same god who appears on No. 378, of which, since only ill-preserved specimens are known, the identification is left uncertain.

Anchialos. 496 and 620. The references to the British Museum Catalogue should have been inserted.

G. F. H.

Recueil Général des Monnaies grecques d'Asie Mineure . . .
 par W. H. Waddington . . . E. Babelon et Th. Reinach.
 Tome I., 4^{ème} fasc.: *Prusa, Prusias, Tius*. With 13
 plates (99–111). Paris: Leroux. 1912.

THIS publication proceeds with great rapidity. The fifth fascicule, containing introduction, indexes, and supplement, completing the first volume, is in the press. The present one describes 187 coins of Prusa, 79 of Prusias, 179 of Tius. The British Museum Catalogue (published twenty-three years ago) enumerates of the same three towns 42, 8, and 23 specimens, a few of which, however, are in the *Recueil* grouped under a single head, as being more or less duplicates. The contrast between the figures serves to indicate the enormous amount of work that remains to be done on the coinage of Asia Minor alone, as well as the growth of material since Mr. Wroth's volume was issued. And even to the lists of the *Recueil* a few more coins may be added, which have been acquired by the British Museum more or less recently. I note them here (they are all of bronze):

Prusa.

1. Pertinax. *Obv.* Same die as *Rec.*, No. 62. *Rev.* ΠΡΟΥ CAΕΩΝ Tyche l., with rudder and cornucopiae. 29·5 mm.

2. Sept. Severus. *Obv.* ΑΥΤ·Λ·CΕΠΤΙ·CΕΒΗΡΟC·ΠΕΡ Bust r., bearded, in paludamentum and cuirass. *Rev.* ΠΡΟΥ CA ΕΩΝ Zeus as on *Rec.*, No. 19. 28·5 mm.

3. Caracalla. *Obv.* ΑΝΤΩΝΙΝΟC ΑΥΓΟΥCΤΟC Bust r., laureate. *Rev.* ΠΡΟΥCA ΕΩΝ Demeter standing l., r. holding branch (?), l. resting on long torch. 21 mm.

4. Elagabalus (or Caracalla?). *Obv.* ΑΝΤΩΝ ΕΙΝΟCΑΥΓ Bust r., beardless, laureate, wearing paludamentum and cuirass. *Rev.* ΓΡ ΟΥ|CAΕΩΝ Flaming circular altar, garlanded. 17 mm.

5. Maximinus. *Obv.* ΓΙΟΥΒΗΜΑΞΙΜΕΙΝΟCΑΥ Bust r., laureate, wearing paludamentum and cuirass. *Rev.* ΓΡ Ο V and (in exergue) CAΕΩΝ Male figure r. in biga. 25 mm.

Prusias ad Hypium.

1. A specimen of No. 42, reading ΑΡΜΕΝ on *obv.*

2. Caracalla. *Obv.* ΑΥΤΚΜΑΥΡΗΛΙΟC ΑΝΤΩΝΙΝΟCΑΥΓ Bust l., beardless, laureate, wearing paludamentum and cuirass. *Rev.* ΠΡΟΥCΙΕΩΝ Π ΡΟCΥΠΙΩ Caracalla to l. in

military dress, with spear in l., sacrificing with patera in r. over flaming garlanded altar. 27·5 mm.

3. Caracalla. *Obv.* ·ΑΥΤ·Μ·ΑΥΡΗΛΙΟC ΑΝΤΩΝΙΝΟCΑΥ Bust r., laureate, beardless, with drapery on l. shoulder. *Rev.* ΠΡΟΒ CΙΕ ΩΝ and (in exergue) ΠΡΟCΥΠΙΩ Eagle, holding wreath in beak, on altar between two signa (as on No. 57, but from a different die). 26·5 mm.

4. Geta. *Obv.* ΠCΕΠΤΙΓΕ - - - Bust r., bare-headed. *Rev.* ΠΡΟΒCΙΕΩΝΠΡΟCΥΠΙ Eagle, as on No. 63 of Diadumenian. 16·5 mm.

Tius.

1. Imperial times. *Obv.* ΤΕΙΟC Bust of Teios r., diademed. *Rev.* ΤΙΑ ΝΩΝ Caduceus. 22·5 mm. (from the Babington Collection).

2. *Recueil*, No. 75: an untouched specimen in the British Museum confirms the reading ΒΙΛΛΑΟC.

3. Geta. *Obv.* ΓΕΤΑCΑΥΓΟΝ - - Bust l., laureate. *Rev.* ΤΙΑ | ΝΩΝ Bull walking r. 22·5 mm.

It may further be noted that the coins Prusa 101 and Tusi 64 are now in the British Museum.

G. F. H.

I Medaglioni Romani. 3 Vols. By Francesco Gneecchi.
Ulrico Hoepli. Milano. 1912.

THOSE who are interested in ancient numismatics, especially Roman, will gladly welcome this monumental work. It is a *Corpus of Roman Medallions*, and its object is to describe all known examples in public and private collections. As a collector Comm. Gneecchi possesses a large series of these medallions, some of the greatest importance; and he would have been much commended if he had given us only a description and illustration of such pieces; but he has acted in a much more liberal and generous spirit, and at very great labour and no doubt at very great personal expenditure, he presents the world with a *Corpus*. The work is issued in three volumes of royal quarto size, which are divided up as follows:—Vol. I contains a description of medallions in gold and silver; Vol. II of those in bronze of large module (*gran modulo*); and Vol. III of those in bronze of lesser modules (*moduli minori*), to which are added such pieces as were issued by the Senate, bearing on them the letters S. C. Each piece when possible is illustrated by photography; and

these illustrations fill no less than 162 plates. The medallions of gold extend from Augustus to Justinian I; those of silver from Domitian to Arcadius; and those of bronze from Trajan to Arcadius, and together they number many hundreds.

About this order of classification it is quite possible that there may be some difference of opinion. The separation of the various pieces according to metals is a somewhat arbitrary one, and seems scarcely to commend itself when dealing with objects which are of a chronological nature. It is not a scientific classification, and is, so to say, somewhat confusing, though the work is supplied with very full indexes. For instance, many of the medallions which are classified as of *moduli minori* are in fact of larger size than those of *gran modulo*; so unless in the first instance one turns to the indexes it is impossible to be certain of finding the piece if one looks under the reign when it was issued. We cannot therefore help thinking that if the subject had been treated more chronologically, that is, reign by reign, with a division of metals, the results would have been more satisfactory. In a monumental work of this nature the simpler the form the better it is. A strictly chronological order under each reign may not have been possible, for, unlike coins pure and simple, medallions do not lend themselves entirely to such classification. Few bear their date of issue; and many cannot be identified with the events which they were intended to commemorate.

In his Introduction Comm. Gneecchi has given his definition of a "medallion." "It is," he says, "a genuine piece in any metal issued above or below in weight to the ordinary and simple currency." This definition is rather a liberal one, and in our opinion it has supplied Comm. Gneecchi with the opportunity of including in his descriptions a considerable number of pieces which do not in any way partake of the nature of a medallion. For instance, the aureus of Elagabalus figured on Pl. 1, No. 8, is described as weighing 6.850 grams (105.5 grs.): not at all an unusual weight as many gold aurei of that emperor run up to 112-115 grs.; on Pl. 4, No. 11, is figured a similar coin of Diocletian, the weight of which is 5.46 grams (84.2 grs.): this weight again is not exceptional. Many of the later pieces in silver of the Constantine period must be considered in the same light, as a double-siliqua is not a medallion; and when we come to the bronze pieces we meet with many small ones which evidently have been plated denarii or which have served as small change in the East, at Antioch, Alexandria, &c. We cannot help thinking, therefore, that Comm. Gneecchi has been somewhat too liberal in his selection. It is unfortunate, as at the present time there is such a strong inclination

to treat any piece a little abnormal in weight as a "medallion," and in consequence to place a fictitious market value upon it.

The author has also discussed the Roman medallion from practically every point of view: its origin, its mode of issue, its metals, its value as a currency, its denominations, its art, type, &c. He has evidently given a great deal of study to his subject and has formed definite views, all of which are deserving of careful consideration. He is evidently a firm believer in the view that all these medallions were intended for currency in spite of their variation in weight. In the case of most of the gold pieces we quite agree with him, for it can be clearly shown that they are as a rule multiples of the aureus or the solidus, and it is quite possible that this is the case with many of those of silver; but the irregularity of the weight of those of bronze leaves considerable doubt in one's mind. Why should not the emperors have issued pieces corresponding to medals of the present time; pieces commemorating events, which were not intended for actual currency? However, this is evidently not Comm. Gneecchi's view, and in order to prove his case he has relied upon what we consider rather weak evidence. Dr. Kenner of Vienna is of the same opinion; but he holds that the bronze pieces represent a heavy and a light standard. Comm. Gneecchi, however, differs, and says, "Whatever may be the size of the medallion all had an equal value in commerce and each one represents two sestertii." To prove his case he weighs a large number of pieces of various reigns from Hadrian to Gallienus, and he finds, whether the number is small or large, that they average in weight reign by reign from 40-56 grammes, and that therefore each piece in currency was of the value of two sestertii. This seems to be carrying the doctrine of averages to rather an extreme point. However, Comm. Gneecchi may be right, but at present we are unable to agree with him entirely. In any case, as we have already remarked, what Comm. Gneecchi has written is deserving of careful consideration.

Numismatique Constantinienne. Tome II. By Jules Maurice.
Paris: Ernest Leroux. 1911.

THE second volume of the above book will more than ever impress the reader with the importance of the numismatic history of the period of which it treats, and with the great care that has been bestowed upon it by the author. It is surprising, also, to note how many rare coins occur, and,

whether from the historical point of view or that of the mere collector of rarities, the work is of very great interest.

It treats of the coinage of London, Lyons, Arles and Tarragona, and so completes the notices of Western mints. It also includes Siscia and Sirmium in central Europe, and Serdica, Heraclea, Thessalonica, and Constantinople in the nearer East. The detailed descriptions of these mints are preceded by introductory chapters which deal fully and lucidly with the religious history of Constantine the Great, the monetary marks and the appearance of Christian types and symbols on certain coins, of which a very useful table is inserted.

The author believes, and gives what seem ample reasons for his belief, that the introduction of these symbols was not generally due to the initiative of the central monetary authorities, nor even, in some cases, to that of the heads of the various mints, but arose from the Christian sympathies of individual engravers, and he explains that such modifications of the types prescribed by the central authority are particularly to be looked for in those mints which, having limited accommodation, allowed their artificers to carry on their work in their own homes and workshops.

He considers, however, that the mint of Siscia acted by direct Imperial order when it placed Christian monograms on the helmet of the Emperor on the well-known small bronze coins bearing the reverse legend VICTORIAE LAETAE PRINCEPER, for such an interference with the Imperial portrait without due authority would have been highly obnoxious to Roman custom.

It is perhaps difficult to explain why this issue was confined to one mint if it is to be accepted as a public declaration of the adherence of Constantine to the Christian faith, and the same remark applies to the scarce coin inscribed SPES PVBLICA which has for reverse type a standard surmounted by the monogram of Christ. For this coin also, the author presumes the express authority of the Emperor, and indeed so conspicuous a religious type could hardly have been issued without it. The coins bearing Imperial portraits with upturned eyes were struck in many mints, but their allusion to Christianity is not so obvious, and, although M. Maurice calls Eusebius to his support, it seems still open to us to doubt whether the use of Christian types during the reign was sufficient to indicate that the religion of Constantine, who was only baptized on his death-bed, was of more than a political character.

The chapter on the London mint will naturally attract

British readers. It is interesting to note how large a number of unpublished pieces are there described, and to find, still existing, errors or local methods of spelling similar to those which constantly occur on the British issues of Carausius. The termination AG for AVG is found in both reigns, and the legend BEAT TRANQLITAS is reminiscent of many earlier blundered inscriptions.

The author discusses the adoption by Constantine of the cult of Sol, when he desired to claim descent from Claudius Gothicus, who professed that cult, and points out that, from the reform of Aurelian, in 274, the name of Apollo disappears from the coinage of the Empire, as indeed one would expect it to do, seeing that the world was craving to worship something more substantial than the mythical deities of the ancients. The only exceptions appear on coins of Carausius, and the author asks if that Emperor was not entirely swayed by Gallic influences and traditions anterior to the reign of Aurelian. To this we may give an affirmative answer. Carausius was a great imitator, and many of his types were undoubtedly taken from those of the Gallic Emperors. He did, however, dedicate so great a number of coins to Apollo as to suggest that he acted from a religious motive, and recognised in that god his principal tutelary deity.

The student of mint-marks will find the book most useful, but it will hardly assist those who endeavour to attach fanciful interpretations to such marks. The difficulty which many collectors have found in distinguishing the coins of Constantinople from those of Arles, issued during the period in which the latter city bore the name of Constantina, is solved so far as the period under consideration is concerned by attributing to the latter mint those marks which comprise the letters CONST, while all those reading CONS are given to Constantinople. In this matter the author conflicts with some earlier writers, but a careful examination of the coins seems to indicate that his attribution is entirely correct.

The present volume comprises an immense amount of valuable information rendering a scientific study of the period possible and even easy, and is in no way inferior to that which preceded it.

M. Maurice is carrying out a great numismatic and historical achievement, and the completion of it will be awaited with much interest.

P. H. W.

H. A. RAMSDEN: *Modern Chinese Copper Coins*. Worcester, Mass., U.S.A. 1911.

WE are glad to have in collected form the useful series of papers that Mr. Ramsden has been contributing to the *Numismatist* on the copper and brass coins of European fabric, which the Chinese Government has been trying to introduce in the last ten years to displace the cast cash which have done duty for centuries. It yet remains to be seen whether the experiment will be a success. This little book is well illustrated, and the useful glossary and introductory notes contain all that is required by the student unacquainted with Chinese. Though they do not strictly fall within the scope of this book, Mr. Ramsden might have included the brass struck Kwang-Tung cash of 1889, as forming an interesting link between the old currency and the coins here described. The author does not appear to have met with copper coins of the Sze Chuan province. The British Museum possesses the 20 and 10 cash pieces in red copper and yellow brass, but they are probably patterns.

J. A.

History of Money in the British Empire and the United States.
By Agnes F. Dodd. Longmans, Green & Co. London, New York, &c. 1911.

THIS is one of the most interesting works of its nature that has appeared in recent times. It is a treatise not only on the actual coinage of the two great English-speaking nations of the world, but on all other matters relating to money from an economic point of view, including the history of paper currency and its effects, of banking, of the establishment of a gold standard in this country, of bimetallism, &c.

The Author has divided her work into two separate parts: the first dealing with money in the British Empire; the second with its general history in the United States.

The first section consists of a series of chapters on the English coinage, tracing its origin under Roman domination on to the Anglo-Saxon and Early English periods; thence through the rule of the Plantagenets, the Tudors, the Stuarts, to the present time, or rather to the end of the reign of George III, since when it has remained on the same basis and in uninterrupted stability. In each chapter besides the history of the coinage, a short account is supplied of its economic side; that is, the value of money as a commodity,

or in other words its purchasing power. It is often a very difficult question to determine offhand what was the purchasing power of say 20s. at a particular period, or what a certain sum of the fifteenth century would represent now. These and other like questions Miss Dodd has attempted to answer period by period, and she has taken as her basis the prices of labour, of various articles of consumption such as meat, wheat, barley, &c., clothes, and other commodities. Naturally as wealth increased there was a general tendency to a rise in prices; but this upward tendency was often affected by some temporary disturbance of an economic nature; and phases like these are satisfactorily accounted for. It is on this account that this work will be useful, not only to the numismatist, who may wish to burrow below the surface, but also to the economist, to whom some knowledge of the English coinage is indispensable.

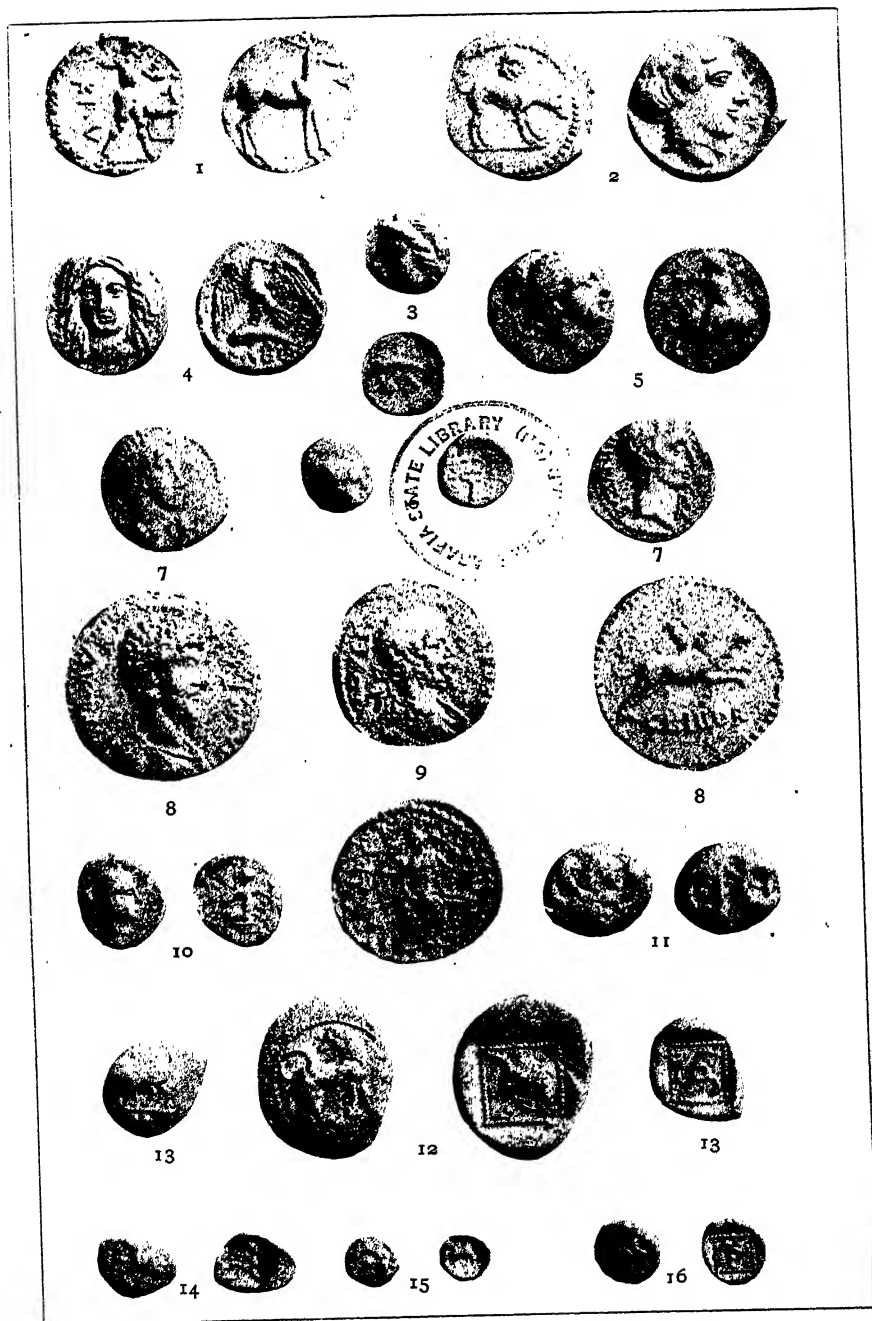
The two chapters on the "Adoption of the Gold Standard" and on "Bimetallism" are exceedingly clearly written, and are most illuminating. In the first instance it is shown how very gradually England was compelled to adopt a gold standard, chiefly owing to the vicissitudes which the silver money experienced at various times, either from debasement, clipping, or exportation; and in the chapter on bimetallism the writer has stated very impartially the views of the monometallist and the bimetalist, a question which a few years ago engaged a good deal of public attention; but which, since Germany has adopted a gold standard, has been allowed gradually to subside. Bimetallism, generally, could only be adopted by a unity of nations: a union which is capable of being disturbed at any moment.

There are other chapters, such as those which deal with the origin of paper money and its development, the establishment of the early banking system, and the currency of India, which are quite deserving of careful study.

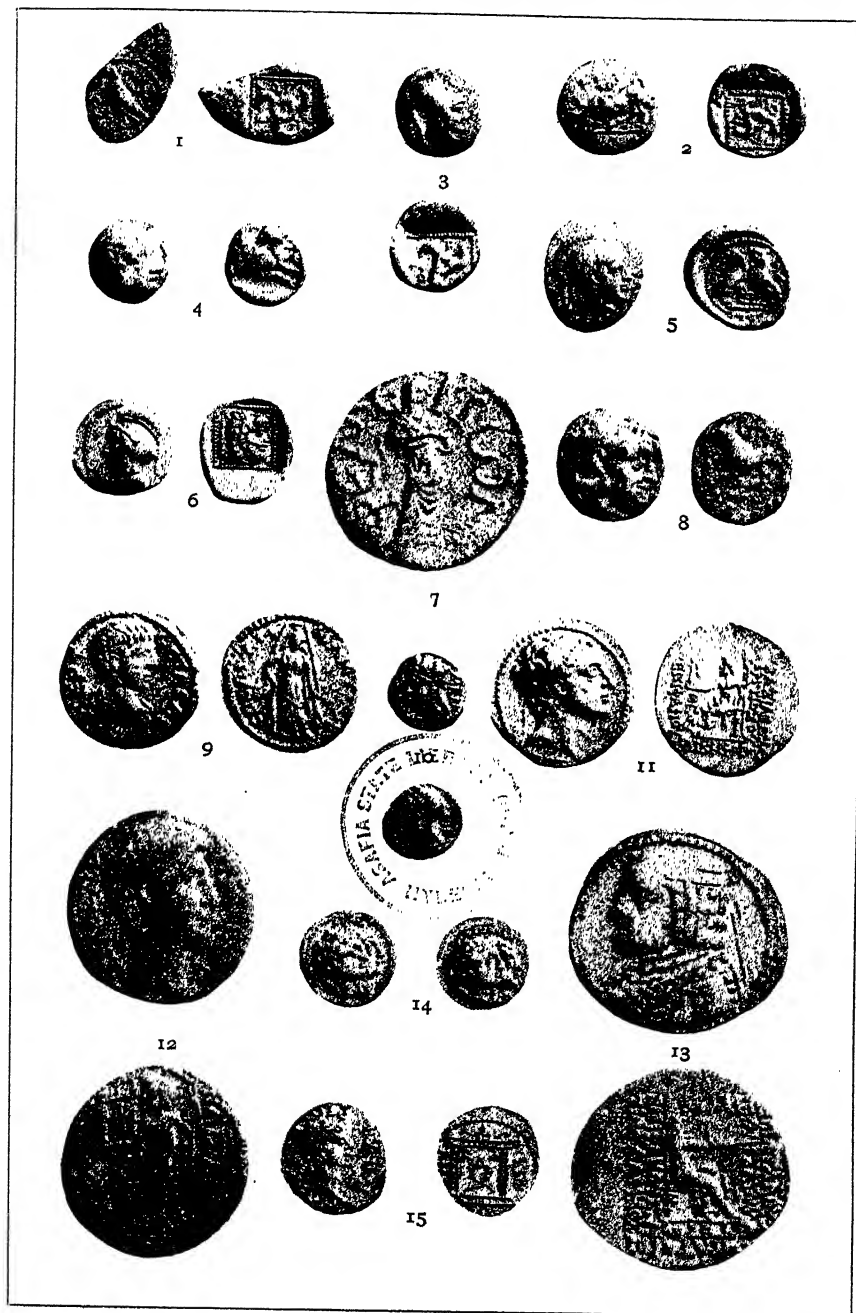
No doubt many also will be interested in the origin and development of money in the United States; though it does not possess the charm of antiquity which encircles that of the mother-country.

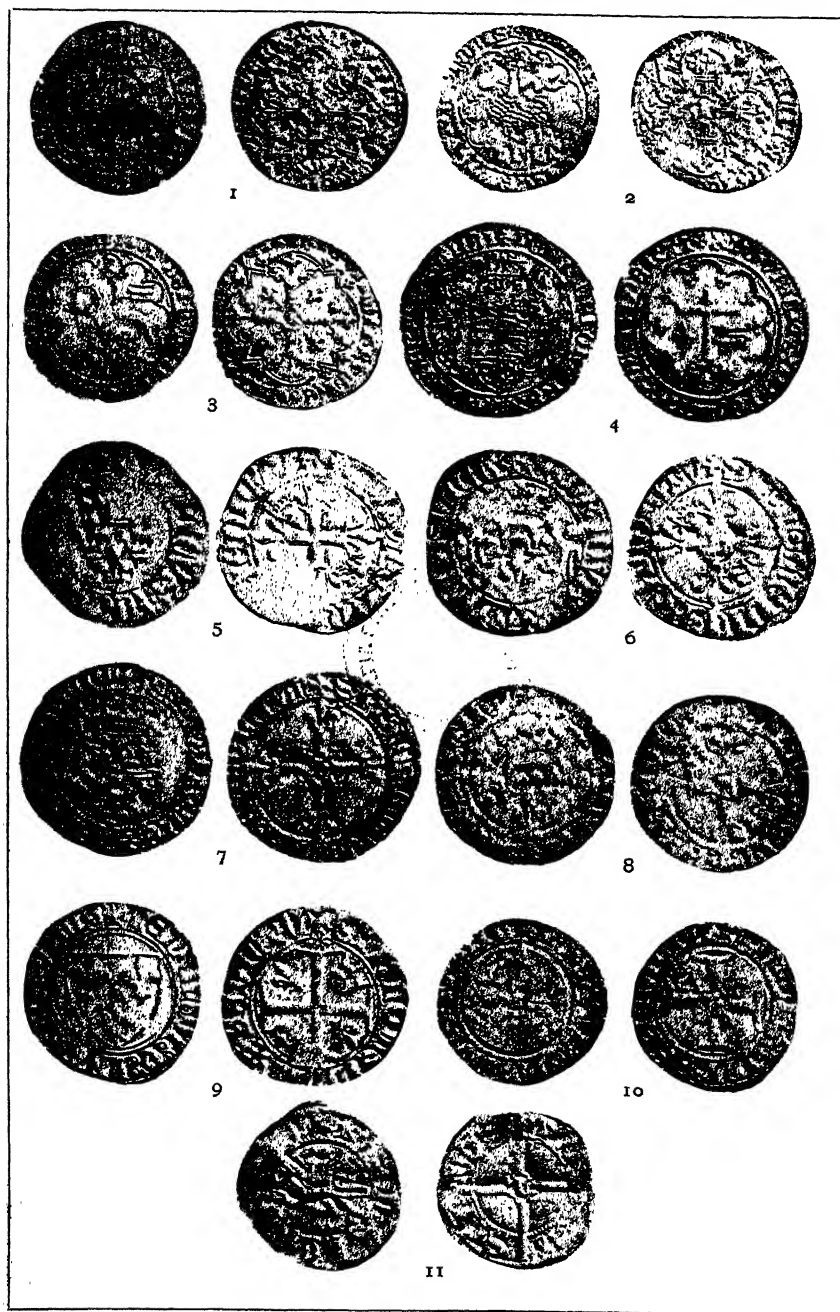
Miss Dodd has gone to the first authorities for her information, and she has used it to the best advantage. Her language is very clear, and she has the great quality of expressing her thoughts in so plain and simple a manner that even to the uninitiated the most difficult problems seem quite intelligible.

H. A. G.



ACQUISITIONS OF THE BRITISH MUSEUM





ANGLO-GALLIC COINS

HENRY V

XII.

RARE AND UNPUBLISHED COINS OF THE SELEUCID KINGS OF SYRIA.

(See Plates IX.-XI.)

To the collector, who is not a mere collector, but in some degree a student, a series of coins provides an interest just in proportion as it remains unworked, and offers problems for solution to which his efforts may contribute.

For this purpose the coins of the Seleucid Kings of Syria are nearly ideal. They have so far not been completely or even thoroughly studied. In consequence much remains to be done in their classification and attributions.

In itself the series presents a high artistic standard, a careful portraiture, and a wide variety of type, ranging, as it does, from 312 B.C. to 69 B.C. The famous tetradrachm of Antiochus VI well illustrates this, or the superb drachm which is described below and figured on Pl. X. 9. But the interest of the series does not abide at home, and is in no sense confined to narrow limits. The Seleucid kings, perhaps more than any other personages of antiquity, have profoundly influenced the life and thought of to-day. They came into contact again and again with the Jews. The Hellenizing policy of Antiochus Epiphanes produced the Maccabees. There

is hardly any tragedy of antiquity more moving than this. Their conflict with the Jews made the conditions of Christianity. The Jews appealed to Rome. Rome thus found a footing in Palestine, and a Roman Governor crucified the Christ, where a Hebrew patriot had failed to keep the Holy Land for Jehovah.

It was a tremendous conflict between Greek beauty and Hebrew holiness. Our Seleucid series shows us the religion, the manners, and the customs of those whose ideal of progress found a set back, because it was not based upon the ideal which we have made our own: *the beauty of holiness*.

It is curious that of late years, when Greek coins have attracted so much attention, this series has fallen behind. It is not difficult of study. An elementary knowledge of Greek is sufficient. There is nothing monotonous about the classification of the series, as there is, let us say, about the coins of Parthia or the Ptolemies. The series needs attention and patience to throw light upon the most interesting period of the world's history.

It is with this intention that I venture to transcribe the following notes on coins in my collection. I have deliberately omitted to describe in detail minor varieties: for example, a half-chalcous of Antiochus I with an interesting countermark of a trident on the reverse, which exhibits Apollo, seated with his lyre beside him; a magnificent tetradrachm of Antiochus II¹ with Apollo seated on the reverse, holding his bow in his hand, and the monogram *N* in the field left; to say nothing of mere varieties of monograms and dies, which occur freely in any collection of Seleucid coins. These ought some

¹ See Pl. IX. 2.

day to be carefully tabulated, and a really scientific classification of this most interesting and important series would be the outcome.

My collection is a comparatively small one, just over two hundred and fifty specimens; and yet it presents varieties which, without egotism, I may claim will add to the general study of the series. The Seleucid coins occur in considerable numbers in gold, silver, and copper.

SELEUCUS I (NICATOR).

1-32 A.S. 312-280 B.C.

1. *Obv.*—Laureate head of bearded Zeus to r. Border of dots.

Rev.—Athene standing, fighting in a car to r., drawn by four horned elephants. She wears Corinthian helmet; her r. hand holds a thunderbolt; in her l. a shield. Above, in field r., anchor with ring. ΒΑΣΙΛΕΩΣ (l.); ΣΕΛΕΥΚΟΥ (r.).

Æ. 0.6. Attic drachm. Wt. 55½ grs.

[Pl. IX. 4.]

This drachm presents neither symbol nor monogram, nor the letter Ⓞ, a most unusual phenomenon. Possibly the ring of the anchor arises from a confusion in the mind of the designer, who had the ordinary piece with the Ⓞ before him; and attached the circle of the Ⓞ to the anchor, which would be intelligible realism.²

2. *Obv.*—Tripod-lebes with cover; handles joined by wreath. Border of dots.

Rev.—Inverted anchor, flanked on r. by monogram Ⓜ, on l. by bunch of grapes. Border of dots. ΒΑΣΙΛΕΩΣ (r.); ΣΕΛΕΥΚΟΥ (l.).

Æ. 0.4. Attic obol. Wt. 9½ grs.

[Pl. IX. 1.]

² Cf. Mr. E. J. Seltman's article in the *Revue Numismatique*, 1911, pp. 161 ff.

This variety of the rare obol of Seleucus is quite unpublished. Both specimens described in the *B.M.C.* and by Babelon have the anchor flanked by Δ—Κ.

3. *Obv.*—Head of Athene to r. in Corinthian helmet.
Border of dots.

Rev.—Elephant to r. Beneath elephant ΠΡ; in field
r. Β.

Æ. 0·7. Half-chalcous. Wt. 61 grs.
[Pl. IX. 5.]

The larger denomination, which I also possess, has been described by Babelon. This half-chalcous, in excellent preservation, does not appear to be published. It is executed in quite a good style.

ANTIOCHUS I (SOTER).

32–51 A.S. 280–261 B.C.

4. *Obv.*—Diademed head of King to r. of young type.

Rev.—Tripod-lebes; eagle to r. between feet of the tripod; field concave and l. monogram $\overline{\text{X}}$, and probably another too worn to distinguish: it might be Α. ΒΑΣΙ (r.); ΑΝΤΙ in exergue.

Æ. 0·5. Lepton. Wt. 18½ grs.
[Pl. IX. 3.]

I possess a couple of specimens of this interesting little coin. The nearest approach to it is the lepton illustrated by Babelon, Pl. v. 13, but in this example the obverse is the full-faced bust of Apollo. Dr. MacDonald has recently published a specimen, which is in the B.M. Collection; but he attributes it to Antiochus II, on the ground of portraiture. I am compelled to differ; both my specimens resemble Antiochus I far more than Antiochus II.

SELEUCUS II (CALLINICUS).

66-86 A.S. 246-226 B.C.

5. *Obv.*—Diademed head of King to r. Border of dots.

Rev.—Elephant walking to r. with mahout holding goad; behind elephant, indistinct monogram. Border of dots. Above, ΒΑΣΙΛΕΩΣ; below, ΣΕΛΕΥΚΟΥ.

Æ. 0·5. Dilepton. Wt. 30·5 grs.

[Pl. IX. 6.]

Both the *B.M.C.* and the Hunterian Collection publish chalcoi of this type, which are sufficiently rare. This denomination seems to be as yet unpublished. It does not appear in Babelon. It rather leads one to suppose that a particular type was adopted for a complete series of denominations, and suggests the many gaps which at present exist in the Seleucid coins may some day be filled up, and the completeness and richness of the series be demonstrated.

6. *Obv.*—Head of Apollo to r., laureate; hair rolled.

Rev.—Dioscuri on horseback to r.; behind, indistinct monogram; in front, Α (probably). ΒΑΣΙΛΕΩΣ (above); ΣΕΛΕΥΚΟΥ (below).

Æ. 0·6. Half-chalcous. Wt. 41·5 grs.

[Pl. IX. 8.]

The *B.M.C.* publishes a chalcous of this type, which Babelon prefers to give to Seleucus I. At present there are no more grounds for the one attribution than for the other.

ANTIOCHUS HIERAX.

85 A.S. 227 B.C.

7. *Obv.*—Diademed head of King to l. Border of dots.

Rev.—Apollo laureate, naked, seated upon omphalos to r.; holds in r. hand arrow; in l. bow. In field l., beyond inscription, an owl. ΒΑΣΙΛΕΩΣ (r.); ANTIOXOY (l.).

R. 1.2. Attic tetradrachm. Wt. 262 grs.
[PL. IX. 7.]

The presence of the owl upon this tetradrachm is exceedingly interesting. The late Sir Edward Bunbury, in his paper on the unpublished coins of the Kings of Syria, illustrated one, with the owl upon the knee of Apollo (*Num. Chron.*, Ser. III. Vol. III. Pl. IV. 6), which he attributed to Antiochus II, because it could not be either Antiochus I or III. For a like reason I attribute this tetradrachm to Hierax. It is of hasty workmanship, as many of his coins must have been; then it bears a symbol and not a monogram merely. Other coins of Antiochus II and Hierax, bearing the owl, which are rare, are published by M. J. P. Six in the *Num. Chron.*, Ser. III. Vol. XVIII., pp. 236, 237.

In the vexed question of the attribution of the coins of the early Antiochi, I suggest that the presence of a symbol is a general, though not invariable, ground for an attribution earlier than the first coins issued by Antiochus III, for the two following reasons: Symbols are common on the tetradrachms of Alexander the Great, which served as the starting-point of the Seleucid series, and after the earlier years of Antiochus III practically disappear, and monograms take their place. This would be quite natural in a settled kingdom. A

symbol would give the authenticity of a recognized city: a monogram would be sufficient, when a king, like Antiochus III, had established his position and could appoint recognized moneyers.

Thus, with Babelon, I would attribute the *B.M.C.* specimen, Pl. viii. 5, of which I possess an example from a broken die, to Hierax. On the other hand, two tetradrachms in my possession similar in treatment only add to the puzzle. I have attributed both of them to Hierax. One shows a lotus flower in the field left, and monogram κ right. This might possibly belong to Antiochus III, though I have seen exactly the same reverse with a head, which is similar to the other tetradrachm³ in my collection. This, however, bears no symbol, but the monogram Ω in the field left. I feel morally certain that this is not Antiochus III. It is much better work than any certain specimen of his, and might well be the issue of Hierax's most successful year. At the same time it is of the utmost importance to remember that even in the worst times a die-engraver might have been exceptionally gifted; and the portraiture of the series is a very unsafe guide. One man worked with his fingers, the other with a hammer and chisel; one man was an artist, the other a mechanic.

The owl is most interesting. It occurs on the coins of Soli in Cilicia from 386-333 B.C., and also on the tetradrachm of Antiochus Epiphanes (*B.M.C. : Seleucid Kings*), in combination with the monogram ΣA . This Mr. Gardner attributed to Salamis, an attribution which is not possible. Probably this coin belongs to Sardes, if ΣA is not a moneyer's name. Obviously it suggests some

³ See Pl. IX. 10.

connexion with Athens, entirely natural in the case of Epiphanes, who had been a magistrate in Athens; but it is quite different with Hierax. No compliment to him could have been intended, and perhaps it is merely the patriotic expression of some Athenian die-engraver.

8. *Obv.*—Diademed head to r. ? Border of dots.

Rev.—Apollo seated on omphalos to l., naked, but wears fillet; holds arrow in r., bow in l. hand. In field

l. monogram $\bar{\Lambda}$. ? for A/M. Mint purporting to be Antioch. ΒΑΣΙΛΕΩΣ (r.); ANTIOXOY (l.).

Æ. 0·7. Attic drachm. Wt. 64 grs.

[Pl. IX. 11.]

There are clear traces of overstriking on the obverse, apparently on a drachm of Seleucus I; for the anchor remains above the King's head, and there are indistinct fragments, which might be part of the chariot, the elephants' trunks, and the legend. The portrait is quite exceptional, and new. That this is a drachm of Hierax I am convinced, and further, from the fact that it is an overstruck coin, I would put it somewhere in his unsuccessful years.

SELEUCUS III (CERAUNUS).

86–90 A.S. 226–222 B.C.

9. *Obv.*—Diademed head of Apollo to r. with hair rolled. Border of dots.

Rev.—Tripod-lebes with cover, wreathed with laurel; in field r. the monogram (?) ⚡; in exergue, anchor. ΒΑΣΙΛΕΩΣ (r.); ΣΕΛΕΥΚΟY (l.).

Æ. 0·7. Chalcous. Wt. 76 grs.

[Pl. IX. 9.]

The presence of the characteristic Seleucid symbol,

the anchor, is peculiar and appropriate. Its use is considerably more popular with Antiochus III. It then apparently disappears from the coinage for a time, and reappears under Alexander I (Bala), Demetrius II, Alexander II (Zebina), and Antiochus VII. It was apparently introduced by Seleucus I, and appears on the silver coinage with the legend and types of Alexander the Great, which he issued upon the death of the Conqueror. On the coinage of Parthia and Commagene it appears to show alliance with Syria. Its sporadic existence must have some definite significance. Students of Jewish coins are familiar with the anchor upon coins of Alexander Jannaeus and Herod the Great, etc.; but this hardly tends to elucidate its meaning.

ANTIOCHUS III (THE GREAT).

90-126 A.S. 222-187 B.C.

10. *Obv.*—Diademed head to r.; hair curiously waved.
Border of dots.

Rev.—Bearded Apollo seated on omphalos to l.; holds in r. hand arrow, in l. bow. Apollo is naked and has hair bound with fillet; wears beard, or has very elongated chin. In field l. the monogram \mathcal{M} and ΛC , or \mathcal{Z} . ΒΑΣΙΛΕΩΣ (r.); ΑΝΤΙΟΧΟΥ (l.). [Traces of overstriking, and probably flaws in die; partly double-struck.]

R. 1·2. Attic tetradrachm. Wt. 268·5 grs.
[Pl. IX. 12.]

This is a most interesting coin. The arrangement of the hair on the obverse is different from anything published, and is apparently Parthian in general character; on the other hand, the reverse is unusually good for Eastern workmanship. The second monogram is most interesting. Is this a lunar C, and, if so, how does it

come here? Babelon considers the earliest example to be on a tetradrachm of Alexander Bala, 163 A.S., 149 B.C. Here is a much earlier instance of the use, if this reading is correct. If it is not a lunar C, what is it? I am confirmed in my opinion that it is a lunar C by the fact that Mr. G. F. Hill, in his *Handbook of Greek and Roman Coins*, p. 213, quotes from Imhoof-Blumer, *Monn. Gr.*, p. 427, an even earlier example in the money of Seleucus II. The obvious Eastern fabric of this tetradrachm makes the use of the lunar C more remarkable. We are here in the beginning of a change in epigraphy. It can hardly resolve itself into a date. The treatment of the Apollo is equally interesting. It is exceptional and noteworthy; though it should be noticed that in the Seleucid series, especially in those of Eastern or barbarous fabric, there is a tendency of accommodation, and a bearded Apollo, if indeed it is bearded, might be a concession to popular Parthian opinion. Cf. the reverse of the drachm of Antiochus IV [Pl. X. 4].

The provenance of this tetradrachm was, I think, Persia.

11. *Obv.*—Diademed head to r. Border of dots.

Rev.—Apollo seated on omphalos, as usual. Border of dots. In field l. the monogram ∇ . Actually upon the omphalos the letter A. ΒΑΣΙΛΕΩΣ (r.); ANTIOXOY (l.). [Of barbarous fabric.]

R. 0.8. Drachm. Wt. 65.5 grs.

[Pl. IX. 13.]

The interesting feature of this drachm is the presence of the usual Parthian mark A. I have seen a tetradrachm with the same mark. The provenance of such coins would be of invaluable assistance in determining the

extent of the Syrian power, which obviously reached in some periods so far as India.

12. *Obv.*—Head of Apollo to r., hair rolled in curls. Border of dots.

Rev.—Apollo naked, standing to l., leans on tripod, holds arrow in r. hand. ? Border of dots. ΒΑΣΙΛΕΩΣ (r.); ANTIOXOY (l.).

Æ. 0·8. Half-chalcous. Wt. 59 grs.
[Pl. IX. 14.]

I possess as well a dilepton of this type. I have a strong feeling that the *B.M.C.* attribution to Antiochus III is wrong, and that these coins really belong to Antiochus IV, whose devotion to Apollo is much more understandable. His love of Greek culture would make him anathema to Josephus, and the Jewish historian's account of his character must be properly discounted.

13. *Obv.*—Elephant with mahout to r. Border of dots.

Rev.—Victory to r. holding crown; in field l. monogram Α; in exergue? . . Δ. —a date. Cf. *B.M.C.*, p. 27, 33, PKA. ΒΑΣΙΛΕΩΣ (r.); ANTIOXOY (l.).

Æ. 0·9. Two chalcoi. Wt. 122 grs.
[Pl. IX. 15.]

This is a singularly interesting coin, which speaks alike of the alliance of Antiochus III with India, and his consequent history. It is quite unpublished, and possibly unique, though its rather poor condition is to be deplored.

14. *Obv.*—Head of King to r. Border of dots.

Rev.—Tripod with cover; in field l. monogram ΑΓ. ? Border of dots. ΒΑΣΙΛΕΩΣ (r.); ANTIOXOY (l.).

Æ. 0·8. Chalcous. Wt. 98 grs.
[Pl. X. 1.]

This is at present an unpublished coin, which obviously belongs to Antiochus III from its characteristic portrait. Possibly it was minted at Ptolemais.

SELEUCUS IV (PHILOPATER).

126-138 A.S. 187-175 B.C.

15. *Obv.*—Diademed head of King to r. Border of dots.

Rev.—Apollo laureate, seated on omphalos, chlamys over r. knee; holds in r. hand arrow, in l. bow. In field r. NB, l. stanchion (?) and ΣΑ. ΒΑΣΙΛΕΩΣ (r.); ΣΕΛΕΥΚΟΥ (l.).

R. 1·1. Attic tetradrachm. Wt. 257·5 grs.
[Pl. X. 2.]

This tetradrachm is exceedingly rare. It is quite a new portrait with border of dots instead of fillet border. I have lately acquired it from Syria. The presence of the monogram in the field (left) goes to prove the force of what I have already said about the British Museum tetradrachm of Antiochus IV with the symbol, owl, and the same monogram ΣΑ.

M. J. P. Six makes it quite plain that this particular coin was minted at Sardes, and Sir Edward Bunbury was probably wrong when he described a variety in his collection as presenting a torch. The torch should be a stanchion (fer-de-lance, *Six*). Sardes is far more probable than Salamis for Antiochus IV; and Salamis is quite impossible for Seleucus IV.

ANTIOCHUS IV (EPIPHANES).

138-149 A.S. 175-164 B.C.

16. *Obv.*—Head of King to r., diademed. Border of dots.

Rev.—Apollo seated l. on omphalos, chlamys beneath and over r. knee; holds in r. hand arrow, in l.

bow. In field r., cornucopiae; l., monogram, $\overline{\Lambda I}$; below monogram, Π. ΒΑΣΙΛΕΩΣ (r.); ANTIOXOY (l.).

R. 0·7. Attic drachm. Wt. 52 grs.
[Pl. X. 3.]

The portrait of Antiochus is barely idealized: this fact and the characteristic appearance of the reverse suggest Eastern workmanship, especially in the treatment of the bow, which is similar to bows appearing on Parthian coins. Its peculiarity consists in the position of the cornucopiae, and its interest lies in the monogram $\overline{\Lambda I}$. I suggest that this is a barbarous imitation of Λ for Antioch, and M for Metropolis, and in connexion with this that ΔN or ΔI are merely barbarous imitations of Λ and do not stand for any city whose name begins with Δ , and that coins bearing these monograms purport to be minted at Antioch, while in fact they are really very Eastern workmanship or barbarous. Probably other monograms of well-known mints are so imitated with no real knowledge, and this may be part of the key to the puzzle of the infinite variety of monograms, which occur on the series.

I have carefully examined about twenty different specimens of similar workmanship. They are from different dies, but all exhibit the same monogram $\overline{\Lambda I}$ and are obviously Eastern in fabric.

DEMETRIUS I (SOTER).

151-162 A.S. 162-150 B.C.

17. *Obv.*—Head of King to r., diademed; clear traces of overstriking. Fillet border.

Rev.—Apollo seated on omphalos l., diademed, and wearing chlamys folded on omphalos and over

r. knee; holds in r. hand arrow, in l. bow. Head from original coin clearly visible. Border of dots. ΒΑΣΙΛΕΩΣ (r.); ΔΗΜΗΤΡΙΟΥ (l.); ΣΩΤΗΡΟΣ (in exergue).

Æ. 0·7. Attic drachm. Wt. 60·5 grs.

[Pl. X. 5.]

This is a particularly interesting coin, and was probably originally issued by Timarchus. An entirely similar instance of overstriking is to be found in the *B.M.C.* tetradrachm of Demetrius and Laodice, Plate xv. 2. Babelon says, "Cette nouvelle empreinte paraît indiquer que Démétrius a voulu effacer de l'histoire jusqu' au nom même de Timarchus et faire disparaître ses monnaies," which sufficiently accounts for the exceeding rarity of Timarchus' coins.

It will be remembered that Timarchus had been one of the favourites of Antiochus Epiphanes, and had been appointed Satrap of Babylon. Upon the death of Epiphanes, he took advantage of the minority of Antiochus V, and raised the standard of revolt. With the assistance of his brother Heraclides he had been proclaimed king in Babylon. Demetrius on his accession in 162 B.C. quickly repressed the revolt and put Timarchus to death. His savage defacement of the coinage of Timarchus is evident not only of Oriental effort to wipe out all remains of a defeated rival, but of the real popularity of the conquered Timarchus. This drachm is a valuable monument of Oriental human nature. It has been suggested to me that this is merely a restrike of one of Demetrius' own drachmae, but the curious remains of the original coin on the obverse are clearly too thick for an exergual line and are much more likely to be the defaced impression of the Artemis, which occurs on the drachm of Timarchus in the *B.M.C.*, Pl. xxviii. 6.

18. *Obv.*—Diademed head to r.; behind $\frac{A}{X}$.

Rev.—Apollo naked standing to r.; leans on tripod r. and holds in r. hand an arrow. Border of dots. The coin has a cast flan and bevelled edge. ΒΑΣΙΛΕΩΣ (r.); ΔΗΜΗΤΡΙΟΥ (l.).

Æ. 0·7. Chalcous. Wt. 81·5 grs.

[Pl. X. 7.]

This is a remarkably interesting coin, because it bears the mark of value on the obverse. Dr. Imhoof-Blumer and M. Babelon have already published coins, as has the *B.M.C.*, of Antiochus IV and Alexander Bala with marks of value upon them, and Dr. Imhoof-Blumer has suggested their true significance. This is a quite new example of a coin bearing a mark of value; it has recently reached me from Syria.

ALEXANDER I (BALAS).

160–168 A.S. 152–144 B.C.

19. *Obv.*—Head of King to r., diademed. Border of dots.

Rev.—Zeus seated on throne without back to l., diademed; wears chlamys over knees, holds Victory in r. hand crowning himself, with l. leans on long sceptre. ΒΑΣΙΛΕΩΣ ΑΛΕΞΑΝΔΡΟΥ (r.); ΘΕΟΠΑΤΟΡΟΣ ΕΥΕΡΓΕΤΟΥ (l.).

Æ. 1·15. Attic tetradrachm. Wt. 255·5 grs.

[Pl. X. 6.]

This tetradrachm is exceedingly rare on account of the border of dots on the obverse. The *B.M.* possesses no similar specimen, and Babelon only gives one, viz. No. 798, which has the monogram ΦP in the exergue.

The fillet border instead of the border of dots first appears on the coins, which were once attributed to Antiochus, son of Seleucus III. Personally I still cling

to this attribution, but the latest edition of the *Historia Numorum* dismisses the attribution with scorn, and gives them wholesale to Antiochus V. I confess that the presence of the fillet border is the best evidence of such attribution, but I submit that if portraiture goes for anything at all, the old attribution is preferable. If Dr. Head, or rather Dr. Macdonald, is correct, then the fillet border first appears in the later issues of Antiochus III, and this would make the classification of the complicated series of Antiochus II and Antiochus Hierax the easier. It is safe to say that, excepting the alleged coins of Antiochus, son of Seleucus III, no tetradrachm with a fillet border is earlier than the later years of Antiochus III. Seleucus IV returns in a few certain instances to the border of dots; and the border of dots appears upon a solitary tetradrachm of Antiochus IV (*B.M.C.*, Pl. xi. 1; *Babelon*, Pl. xii. 3), and in the type of Seleucus IV of which a description is given here (Pl. X. 2). I have always wanted to query this latter attribution, but this tetradrachm of Alexander disturbs my theory.

With these solitary exceptions the fillet border in one form or another—that is, more or less elaborated—lasts until the end of the Seleucid series, always excepting coins of Phœnician mints, with the Ptolemaic reverse of an eagle, upon which the border of dots is invariably present.

20. *Obv.*—Radiate and diademed head to r. Fillet border.

Rev.—Apollo standing naked to l.; holds in r. hand arrow, with l. leans on bow. ΒΑΣΙΛΕΩΣ (r.); ΑΛΕΞΑΝΔΡΟΥ (l.).

R. 0·5. Half-drachm. Wt. 26 grs.

[Pl. X. 8.]

All previously published specimens have a border of dots upon the obverse. This is distinguished from them by a fillet border. The alternation of fillet border and dotted border in the later kings of the Seleucid series appears to be dictated only by the caprice of the moneyer, although usually the larger denominations present the fillet border and the smaller the border of dots. This specimen is an exception to the rule and therefore is worthy of consideration.

ANTIOCHUS VI (DIONYSUS).

167-170 A.S. 145-142 B.C.

21. *Obv.*—Diademed and radiate head of King to r. Border of dots.

Rev.—Apollo naked, seated to l. on omphalos; laureate head; his chlamys below him and folded over his r. knee. In his r. extended hand he holds an arrow; in his l. a bow resting upon the ground. Between his legs the letter K. In exergue the date ΗΞΡ (168 A.S., 144 B.C.). Probably struck at Carne. ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ (r.); ΕΠΙΦΑΝΟΥΣ ΔΙΟΝΥΣΟΥ (l.).

℞. 0.7. Attic drachm. Wt. 64.5 grs.

[Pl. X. 9.]

This perfect little drachm is illustrated to show how highly artistic is the work to be found upon the Seleucid coins at their best. The *B.M.C.* specimen of the same date has the monogram ΗΡ (*i.e.* for Heraclea). The work is worthy to rank with the best period. Indeed, all the fleur-de-coin pieces of the series possess real artistic merit.

22. *Obv.*—Diademed head of King to r.; below, ΣΤΑ. Fillet border.

Rev.—Dionysus standing to l., clad in chiton ; holds in r. hand cantharos, in l. thyrsus adorned with wreath. Border of dots. BA . AN. (l.).

Æ. 0·6. Half-chalcous. Wt. 39·5 grs.
[Pl. X. 10.]

This is an interesting piece, because it is the solitary example which bears the letters ΣΤΑ on the obverse. Their presence beneath the head of Antiochus VI with the reverse type of Dionysus is significant, when you remember that according to the mythology Staphylos was the son of Dionysus. The interpretation of ΣΤΑ has always been a puzzle; and it is difficult to believe that it is only a romantic name for Tryphon, or even that it stands for the name of a second official in the guardianship of the ill-fated boy king. Probably it is an allusion to the claim of Antiochus VI to be Dionysus. It is hardly a mere coincidence that the ivy leaf finds a place in the border of the beautiful tetradrachms which belong to him.

DEMETRIUS II (Nicator).

Second reign. 182–187 A.S. 130–125 B.C.

23. *Obv.*—Diademed head of King to r., wears full beard and hair waved in Parthian fashion. Fillet border.

Rev.—Zeus diademed, and clad in chlamys, seated on throne to l.; holds sceptre in l. and in r. little Victory, who crowns him. Slightly double-struck. In field l., ΔΝ. In exergue, date ΓΠΡ. 183 A.S., 129 B.C. ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ (r.); ΘΕΟΥ ΝΙΚΑΤΟΡΟΣ (l.).

Æ. 1·15. Attic tetradrachm. Wt. 264 grs.
[Pl. X. 11.]

This coin has been mounted as a brooch, and the surface presents both the smoothness due to attrition,

and the marks of the fire, while part of the solder remains on the obverse. This treatment of the head combining the Parthian rendering of the hair with the full beard is unique among tetradrachms, although a similar type is known among the drachms of Demetrius. It differs from the famous Bunbury specimen in the British Museum, in that this example is fully bearded, and the Bunbury specimen shows only a slight beard.

It should be carefully compared with the tetradrachms of Mithradates I of Parthia (*B.M.C.: Parthia*, Pl. iii. 7-12). The treatment of the hair, the eye, and the beard on the obverse are similar, while on the reverse the Λ instead of A, and the upturn of the top stroke of the Σ are easily paralleled. The letters ΔN in the field to left would be the Parthian equivalent for AN, which, as I have already said, is a common practice in the Syrian series of Eastern fabric, and purport that the coin was struck at Antioch.

The history of Demetrius and his captivity in Parthia is so well known that it does not need to be set out here. It is sufficient to remember that in the year $\Gamma\Pi P$, i.e. 183 A.S., 131 B.C., Demetrius was put forward as a candidate for the Syrian throne by the Parthian king against Antiochus VII. Sidetes. I suggest that Demetrius had adopted the Parthian dress and appearance: *more gentis parthicae*, as Longpérier⁴ writes of him.

This coin, then, would be the work of a Parthian artist on the spot before he left for his campaign. In the next year he had established his position in Syria, and a Greek artist continues the bearded type, and a fairly common series beginning from $\Delta\Pi P$ and running on to $\Pi\Pi P$, 187 A.S., 125 B.C., would be naturally explained.

⁴ *Rois Parthes Arsacides*, p. 28.

This full-bearded type, as well as the slightly bearded Bunbury specimen, seems to me to throw light upon a very extraordinary tetradrachm, which Babelon assigns to the first reign of Demetrius and illustrates on Pl. xix. 15.

It is slightly bearded and bears upon the reverse Apollo seated with the usual attributes. Because of this type of reverse Babelon does not hesitate to place it in the first reign. He says that the head is juvenile, and the reverse type does not appear in the second reign.

The argument from the youthfulness of the face may be dismissed without much trouble. Iconography is a poor guide in the Seleucid series. Rejuvenating a monarch's portrait is an ancient form of flattery. On the other hand, there is not much to choose between this and the tetradrachm with reverse Zeus seated and the date ΔΠΡ (Pl. xxii. 9) on the score of looks. This is obviously the second reign.

With regard to the reverse, although Babelon states that the type of Apollo is unknown in the second reign (cf. *Intro.* cxlvi) he actually illustrates a bronze coin (Pl. xxii. 16) with the same reverse of the second reign.

This is curious logic, and I submit that the ground for classification should be sought elsewhere.

The tetradrachm in question has the legend ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ ΘΕΟΥ ΝΙΚΑΤΟΡΟΣ. Every other tetradrachm of the first reign, except those of Phoenician mints, which have merely ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ, which is usual, reads ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ ΘΕΟΥ ΦΙΛΑΔΕΛΦΟΥ ΝΙΚΑΤΟΡΟΣ, whereas all the tetradrachms of the second reign read with the one I am considering ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ ΘΕΟΥ ΝΙΚΑΤΟΡΟΣ.

I therefore conclude that coins with ΦΙΛΑΔΕΛΦΟΥ upon

them belong to the first reign and those without belong to the second, and that the type of the reverse has nothing at all to do with the attribution. It is quite as natural in the second reign as in the first.

The curious irony of it all is that on this ground I would like to transfer the bronze with reverse of Apollo because of the presence of ΦΙΛΑΔΕΛΦΟΥ to the first reign, as well as the other illustrated upon the same plate, No. 18: *obv.* head of Apollo, *rev.* Tripod. Such a classification has at least a real ground for its making, and does not appear to be so arbitrary as Babelon's. It is quite conceivable that by the second reign of Demetrius his affection for his brother had ceased to be a political asset.

24. *Obv.*—Diademed and bearded head of King to r.

Rev.—Eagle to l. on prow; palm under r. wing. In field l., $\overset{A}{|E}$, and traces of club monogram; r. $A\check{S}$; and date, $\Theta\Gamma\text{P}$. Struck at Tyre.

\mathcal{R} . 1.1. Phoenician tetradrachm. Wt. 214.5 grs. [Pl. X. 12.]

~~This coin, which~~ has suffered from wear and tear, is singularly interesting and is typical of the surprises which are still in store for the collector of the Seleucid series.



Tetradrachms of Phoenician mints with the exception of one with the monogram ρ , which is described by Bayer, Mionnet, Bunbury, and Babelon, and attributed to Ptolemaïs with the date $\Theta\Gamma\text{P}$, all continue the beardless type of the first reign. Bunbury with some justice queries the attribution to Ptolemaïs; and this query only adds to the interest of my coin. Despite its battered condition, it is indubitably struck at Tyre—or

perhaps it would be more accurate to say, it professes to be struck at Tyre. That starts a delightful series of problems. Babelon publishes a beardless head type of the same coin, struck at Tyre (1207 of his catalogue). What is the significance of this double type? Why is this bearded type struck at all? Demetrius was of course sufficiently established by this time. Suppose him in love with Parthian customs, as well as with a Parthian wife, and you account for the bearded type; but the provocation of it all is that in the very next year 117, he strikes at Tyre both a tetradrachm and a didrachm of the beardless type, of which I possess a magnificent specimen,⁵ which is as yet apparently unpublished, though the tetradrachms of both ΣΠΡ and ΕΠΡ are well known.

ALEXANDER II (ZEBINA).

184-190 A.S. 128-123 B.C.

25. *Obv.*—Diademed head of King to r. ? Fillet border.

Rev.—Zeus, diademed, seated to l. on throne with back; holds in r. hand winged Victory, who crowns King's name; in l. long sceptre; clad in chlamys. Below throne, monogram, ; in field l., ; in exergue, ΘΠΡ. 189 A.S., 124 B.C. ΒΑΣΙΛΕΩΣ (r.); ΑΛΕΞΑΝΔΡΟΥ (l.).

℞. 1·1. Attic tetradrachm. Wt. 260 grs.
[Pl. XI. 2.]

This tetradrachm has a special interest, not only from the fact that it is dated, which is unusual (the *B.M.C.* has no dated specimen), but also from the treatment of the figure of Zeus. His right leg is raised and is apparently resting upon a bar of the throne. This led

⁵ Pl. X. 13.

me to suspect the coin at first, but the edge shows two distinct marks of a hard, genuine patina.

CLEOPATRA (THEA) AND ANTIOCHUS VIII (GRYPUS).

187-192 A.S. 125-121 B.C.

26. *Obv.*—Diademed head of Grypus to r. Fillet border.

Rev.—Owl standing r. on amphora; in field r., traces of monogram; in exergue, date ΘΠΡ or ΦΡ. ΒΑΣΙΛΙΣΣΗΣ ΚΛΕΟΠΑΤΡΑΣ (r.); ΒΑΣΙΛΕΩΣ [ANTIOXΟΥ] (l.).

Æ. 0.7. Chalcous. Wt. 80 grs.

[Pl. XI. 1.]

This is quite a new type: all published specimens have a radiate head⁶ on the obverse, and ΚΑΙ on the reverse. Although there is plenty of room for the ΚΑΙ on the reverse, it is deliberately omitted in this example.

ANTIOCHUS VIII (GRYPUS).

192-216 A.S. 121-96 B.C.

27. *Obv.*—Middle-aged diademed head of King to r. Fillet border.

Rev.—Diademed Zeus seated to l. on throne with back, with chlamys over knees; holds in l. hand long sceptre, in r. little Victory, who crowns him; in field l. monogram, $\frac{\text{B}}{\text{A}}$; below throne the letter F; all in wreath. ΒΑΣΙΛΕΩΣ ANTIOXΟΥ (r.); ΕΠΙΦΑΝΟΥΣ (l.).

Æ. 1.1. Attic tetradrachm. Wt. 249 grs.

[Pl. XI. 4.]

⁶ An interesting confirmation of this coin is to be found in a chalcous of Antiochus VIII, which has come into my possession since writing this paper. In good preservation it presents a similar diademed head and has on the reverse an eagle with sceptre, date ΒΠΡ, and a plustre with inscription ΒΑΣΙΛΕΩΣ ANTIOXΟΥ—remainder off the flan.

This tetradrachm, which represented him as a middle-aged man, well illustrates his nickname Grypus, the hook-nosed. Other tetradrachms present the feature considerably less developed, and show the portrait of a considerably younger man.

The *B.M.C.* attributes this somewhat large series of coins to Antiochus XI, but the omission of ΦΙΛΑΔΕΛΦΟΥ is generally accepted now as sufficient ground for giving it to Grypus. On the other hand, it is difficult to be satisfied with the attribution of the copper coins, having on the reverse a double cornucopiae, to Grypus, because their fabric is so entirely unlike his coins; and though there is a similarity of likeness it is not impossible to find the same features as are evident in the tetradrachm, reading ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ ΕΠΙΦΑΝΟΥΣ ΦΙΛΑΔΕΛΦΟΥ, which is published by Babelon, and is undoubtedly Antiochus XI. The omission of the full title on a copper coin is by no means unusual in the Seleucid series.

Various monograms have already been published, but this with the Γ beneath the throne is new, though other letters and monograms appear again and again.

28. *Obv.*—Diademed head to r. Border of dots.

Rev.—Cornucopiae filled with fruits; in field l., monogram Ê. ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ (r.); ΕΠΙΦΑΝΟΥΣ (l.).

Æ. 0.9. Two chalcoi. Wt. 122 grs.

[Pl. XI. 3.]

This coin calls for no remark except that it is a specimen of the double chalcous, which is well known in the single variety.

ANTIOCHUS IX (CYZICENUS).

196-217 A.S. 116-95 B.C.

29. *Obv.*—Diademed head of King to r., with slight whisker. Fillet border.

Rev.—Athena to l. in chiton and peplos, wears crested helmet, holds winged Victory in r. hand away from her, in l. long spear and shield adorned with head of Medusa; in field r. flower (?), l. monogram ΔΡ. ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ (r.); ΦΙΛΟΠΑΤΟΡΟΣ (l.). Wreath border.

℞. 1.3. Attic tetradrachm. Wt. 262 grs.
[Pl. XI. 6.]

This is a curious piece of work. The flan is unusually broad: the likeness of the King is uncommon. Mostly the portraits show a slight beard and moustache, though some are clean shaven. The treatment of Athena is remarkable: she is almost an inch in length. The symbol in the field (right) resembles the lily on the Jewish shekels more than anything else. Dr. Macdonald, *Hunter Catalogue* (Pl. lxx. 8), attributes a tetradrachm of Seleucus VI with a similar five-leaved flower in the field left to the mint at Seleucia ad Calycadnum.

30. *Obv.*—Diademed head to r., probably slightly bearded. Fillet border.

Rev.—Winged Victory marching to l., holds wreath in r. hand. In field l. monogram Ϟ, and in exergue traces of further monogram or date. ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ (r.); ΦΙΛΟΠΑΤΟΡΟΣ (l.).


℞. 0.7. Attic drachm. Wt. 52.5 grs.
[Pl. XI. 5.]

This is an entirely new type of drachm. All drachms of Antiochus IX are scarce although the tetradrachms are abundant. Babelon publishes a similar type in bronze.

PHILIP (PHILADELPHUS).

220-229 A.S. 92-83 B.C.

31. *Obv.*—Head to r. diademed. Fillet border.

Rev.—Zeus laureate, seated l. on throne with back ; holds in r. hand Victory without wings, who offers him ribboned palm ; in l. hand sceptre. In field l., ✕ ; below throne,  ; in exergue, Δ. ΒΑΣΙΛΕΩΣ ΦΙΛΙΠΠΟΥ (r.) ; ΕΠΙΦΑΝΟΥΣ [ΦΙΛ]ΑΔ[ΕΛΦΟΥ] (l.).⁷

R. 1·1. Attic tetradrachm. Wt. 231 grs.
[Pl. XI. 7.]

This piece is interesting both for the new monogram and for the substitution of a palm for a wreath in the Victory's hand. The work is much rougher than is to be found on the usual type of Philip's tetradrachms, and suggests an Eastern origin.

The monogram is evidently meant to stand for Antioch.

Another interesting tetradrachm of Philip in my collection [Pl. XI. 8] has a much younger head than usual on the obverse, and differs from all published varieties by showing no letter under the throne, but merely the monogram in the field left Δ. Its provenance is Syria.

Since writing the above I have been able to add yet another tetradrachm (Pl. XI. 9), which is distinguished by a careful young portrait, and the most pronounced fillet border ; while the reverse of the ordinary Zeus seated type, presents a curious collocation of monograms. In

⁷ I have since seen another tetradrachm from a different die with the palm instead of wreath. So this feature appears to be deliberate and not accidental.

the exergue are the letters AN, below the throne Δ and in the field left ω _A; the cursive omega, being singularly interesting, though not unknown.

ANTIOCHUS XI (PHILADELPHUS).

220 A.S. 92 B.C.

32. *Obv.*—Laureate head of King to r. Fillet border.

Rev.—Half-naked Zeus, seated to l. on throne with back, laureate head, chlamys on his knees. In his extended r. hand he holds little Victory without wings, who presents him with wreath; with his l. leans on a long sceptre. In field l. monogram, Φ . Whole surrounded by laurel wreath. ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ (r.); ΕΠΙΦΑΝΟΥΣ ΦΙΛΑΔΕΛΦΟΥ (l.).

Æ. 1·0. Attic tetradrachm. Wt. 238·5 grs.
[Pl. XI. 10.]

These tetradrachms of Antiochus XI are naturally very rare from the short length of his reign. This is similar to the specimen in the British Museum, though it shows the monogram on the reverse more clearly and is generally in better preservation; and though it has already been published by Babelon, it is worthy of being recorded here. It is equally well worth recording that Dr. Macdonald has published a variety in the *Zeitschrift für Numismatik*, 1912, p. 106. This specimen is to be found in the Berlin Museum. Its variation consists in the monogram Φ over Δ in the field left beyond the inscription, and below the throne right Δ . Unhappily the flan is small, and so the wreath on the obverse is hardly apparent in the illustration.

There remains a problem for students of the Seleucid

series, to which I have referred in the course of this paper, namely, the elucidation of the monograms—nearly 400—which appear upon the coins. Many are likely to remain an insoluble problem, but many are illiterate imitations of the monogram of the famous mint at Antioch, and more or less varieties of AN·M (Metropolis). A parallel is to be found in the imitations of the Jewish shekels, of which the inscriptions are often nonsense, or on the paper Chinese dollar, which was copied from the Mexican. I feel sure that such letters and monograms as ∇ , Δ I, Δ N, A, ∇ , A, ∇ , W, Ξ , Ξ , &c., really purport that the coins bearing them were minted at Antioch, wherever, as a matter of fact, they were actually issued, and this is particularly noticeable in coins of Eastern fabric. The pre-eminent popularity of the Antioch mint was traded upon to give the required cachet to other issues.

EDGAR ROGERS.

XIII.

HOARDS OF ROMAN GOLD COINS FOUND IN BRITAIN.

By H. H. E. CRASTER AND F. HAVERFIELD.

PART I.¹

SECOND AND FOURTH CENTURY HOARDS FOUND AT CORBRIDGE, 1908-1911.

By H. H. E. CRASTER.

(See Plates XII.-XIX.)

(i.) CORBRIDGE SECOND-CENTURY HOARD.

For five years excavations have been proceeding, under the direction of the Corbridge Excavation Committee, on the site of the Roman town of Corstopitum, near Corbridge, in the county of Northumberland. The season of 1911 was made memorable by the discovery, on September 14, of a bronze jug which was found to contain one hundred and fifty-nine Roman *aurei*. The local associations of the find are not quite certain. Here, however, we are concerned only with the fact that, on the jug being lifted by the finders, the weight of its contents, amounting to about four pounds, proved too great for the decayed bronze; the bottom fell out, and a

¹ This is Part I. of a paper on "Hoards of Roman Gold Coins found in Britain," that is, hoards consisting wholly or largely of gold pieces. Part I., by Mr. Craster, deals with the two Corbridge finds. Part II., giving an account of other finds, will appear in a subsequent number of the *Chronicle*.

stream of gold coins poured forth. The coins were collected and counted, to the number of one hundred and fifty-nine; but there is every probability that an *aureus* of Trajan (No. 83 in the following list), found next day in the soil on or close to the spot where the jug had stood, had fallen out of the jug, and that the total should consequently be given as a hundred and sixty. In addition to the *aurei*, two bronze coins were found filling the narrow neck of the jug, where they had been placed, not, of course, with any object of hoarding, but merely to act as a stopper to the narrow neck. Possibly they were also intended to deceive the casual finder into the belief that the contents of the jug were merely bronze. These coins were the following:—

1. *Obv.*—IMP CAES NER TRAIANO OPTIMO AVG GERM.
Radiate and draped bust of Trajan r.

Rev.—DAC PARTHICO P M TR P XX COS VI P P.
Within a wreath, SC *Semi-as* of Trajan;
Cohen 123; 116–117 A.D.

2. *Obv.*—HADRIANVS AVGVSTVS P P. Laureate head of
Hadrian r.

Rev.—COS III S C. Salus r., feeding a serpent which
she holds in her arms. *As* of Hadrian; Cohen
371; 127–128 A.D.

The gold coins represented the following emperors:—

Nero	10	Hadrian	35
Galba	3	Sabina	3
Otho	3	Aelius	1
Vitellius and L. Vitellius	1	Antoninus Pius	12
Vespasian	15	Antoninus Pius and M.	
Titus	11	Aurelius	1
Domitian	5	Faustina, senior	7
Trajan	47	Marcus Aurelius	4
Marciana	1		
Hadrian and Trajan . . .	1	Total	160

The ten *aurei* of Nero all fall within the last five years of his reign (64-68 A.D.), and are subsequent to the reduction of the gold standard effected in 64. In that year the ratio of the *aureus* to the pound weight was reduced from forty to fifty-five, this being equivalent to a reduction from 8.175 to 7.266 grammes per coin. The four *aurei* of Marcus date from within the reign of Pius, the latest of his coins belonging to the eleventh year of his tribunician power (157 A.D.). The latest of the coins of Pius belongs to the twenty-second year of his tribunician power (159-160 A.D.). The seven coins of Faustina the Elder are not easily datable; one was struck in her lifetime (137-140), while the other six are "consecration" coins. On six out of the seven coins the empress is shown in diademed coiffure; only on one of the consecration coins is her head veiled. The date of change in coiffure on the coins of this empress cannot be accurately determined, but is not later than 156-157 A.D., the veiled bust being found on Alexandrian coins of that year (twentieth year of Pius).

Thus, whether the coin-series of Pius, of Marcus, or of Faustina be taken, the termination of the series is found to be not earlier, and very little later, than 159 A.D. There was a comparatively small output of gold coinage in the last eighteen months of Pius (160-161); consequently the money might have been deposited in 160 or 161 and yet failed to include any money minted in those years. Yet, when one takes into consideration the probable rapidity with which gold circulated, and the fact that the coin series of Faustina and of Marcus close before that of Pius, it seems improbable that the deposit is later than 161, and it may therefore be provisionally assigned to the years 160-162 A.D.

The historical significance of this date is considered later.

A noticeable feature in the collection is the entire absence both of coins of Domitian, as sole emperor, and of those of Nerva, and a consequent gap in the series extending from 80 to 98. On the other hand, the preceding sixteen years (64-80) are represented by no fewer than forty-eight coins, and these include types of considerable rarity, whereas the coins of Domitian, absent from this series, were struck in large quantities, and are generally of frequent occurrence. This circumstance might suggest that we have to deal with two collections, of which one was amassed between the years 64 and 80, and the other between the years 98 and 159; that the whole forms a hoard superimposed upon a hoard, and that the second-century hoarder had acquired and added to his stock a first-century deposit that had, for one reason or another, ceased to be added to after 80 A.D. But against this surmise must be set the fact that few of the early coins lack signs of wear. The absence of Domitian and Nerva coins is no doubt due to circumstances peculiar to the hoard, and cannot be explained on currency grounds; but it is probably useless to speculate on those circumstances.

One inference may, however, be safely drawn. The wealth here accumulated began to be collected in the first century. It seems unlikely, at the very least, that a capitalist of the reign of Trajan should have collected, in addition to forty-eight coins of that reign, as many more of Nero, his immediate successors, and the early Flavians. It is still more impossible to think that the coins of the short-lived emperors, Galba, Otho, and Vitellius, survived in use to any extent into the second century,

or that so many as seven examples of their reigns should be found in a collection of a hundred and sixty coins, unless that collection dates its origin from Flavian times. Where the hoard was accumulated is a different and less answerable question, nor can we tell whether the accumulators were private persons or some official treasury.

The hoard may, then, be taken to be the savings of several generations, which began to be laid by in the last quarter of the first century and was hidden about 160-162. Accumulation was steady and gradual; consequently, the hoard is unusually representative and contains comparatively few duplicates. It possesses the further feature of including a specially large proportion of rare types, a circumstance that may be partly fortuitous, partly due to a natural predilection of the owners to put by artistic and uncommon coins by preference to the ordinary currency of the day. The following are the rarest types represented:—

GALBA.

Obv.—IMP SER GALBA CAESAR AVG P M.

Rev.—IMP. No. 11.

OTHO.

Obv.—IMP M OTHO CAESAR AVG TR P.

Rev.—PAX ORBIS TERRARVM. No. 14.

Obv.—IMP M OTHO CAESAR AVG TR P.

Rev.—SECVRITAS P R (two specimens, Nos. 15 and 16).

VITELLIUS AND LUCIUS VITELLIUS.

Obv.—A VITELLIVS · GERMAN IMP TR P.

Rev.—L VITELLIVS COS III CENSOR. No. 17.

TRAJAN AND TRAJAN SENIOR.

Obv.—IMP TRAIANVS AVG GER DAC P M TR P COS
VI P P.

Rev.—DIVVS · PATER · TRAIANVS. No. 82.

MARCIANA.

Obv.—DIVA AVGVSTA MARCIANA.

Rev.—CONSECRATIO. No. 96.

HADRIAN AND TRAJAN.

Obv.—IMP CAES TRAIAN HADRIAN OPT AVG G · D
PART ·

Rev.—DIVO TRAIANO · PATRI AVG. No. 97.

HADRIAN.

Obv.—HADRIANVS AVGVSTVS.

Rev.—COS III. No. 112.

FAUSTINA THE ELDER.

Obv.—DIVA AVG FAVSTINA.

Rev.—PVELLAE FAVSTINIANAE. No. 151.

Much the rarest of these coins is the Vitellius, of which an example, though from a different die, was acquired in the Duc de Blacas' collection by the British Museum.

Gold ceased to be struck in the provincial mints of

Gaul and Spain after the reign of Vespasian, and it is therefore not surprising that almost every specimen in the find is from the Rome mint. No specimens can be pronounced Spanish, but three at least are of Gallic origin. These are—

GALBA.

1. *Obv.*—IMP SER GALBA CAESAR AVG P M. Laureate head r.

Rev.—IMP. Galba on horseback r., raising r. hand.

VESPASIAN.

2. *Obv.*—IMP CAESAR VESPASIANVS AVG. Laureate head r.

Rev.—COS III TR POT. Aequitas standing l., holding balance and sceptre.

3. *Obv.*—IMP CAESAR VESPASIANVS AVG. Laureate head r.

Rev.—TR POT COS III. Aequitas standing l., holding balance and sceptre.

As might naturally be expected, specimens of the same type are, more often than not, struck from different dies. The hoard does not include more than four pairs of exact duplicates: *i.e.* coins struck from the same obverse and reverse dies. These are the coins numbered in the following list: 28-29, 120-121, 129-130, and 138-139. Nos. 29-30, 130-131, and 143-144 are struck from the same obverse but different reverse dies. There is a larger number of specimens of distinct obverse but identical reverse dies. These are Nos. 30, 36; 65, 66; 91, 93; 104-105; 108-109; and 131-132.

The standard weight of the Neronian *aureus* (from

64 A.D.) is 7·266 grammes, or 112 grains Troy measure. Naturally, the coins are rarely that exact weight. Twenty-seven specimens out of the hundred and sixty exceed it; the majority fall below. The Neronian and Flavian *aurei* range from 108 to 113 grains; those of Trajan and Hadrian exhibit greater fluctuations, namely, from 105·3 to 113·6 and from 107·7 to 114·1 respectively; while those of Pius and Faustina approximate closest of all to the standard, and range from 109·3 to 112·7. The heaviest coin in the series is one of the latest, namely, an *aureus* of Marcus (No. 158), weighing 115·8 grains.

Taken as a whole, the coins are in remarkably good preservation. In specially fine condition are—

- No. 57. Trajan, *rev.* P · M · TR · P · COS · IIII · P · P
- No. 97. Hadrian and Trajan, *rev.* DIVO TRAIANO · PATRI
AVG
- No. 112. Hadrian, *rev.* COS III
- No. 126. Hadrian, *rev.* ADVENTVI AVG ITALIÆ
- No. 144. Antoninus Pius, *rev.* COS IIII
- No. 149. Antoninus Pius, *rev.* FORTVNA OPSEQVENS
- No. 156. Faustina Senior, *rev.* AVGVSTA

Some of the gold coins were tarnished, but cyanide of potassium was found effective for removing the stain, and left the gold in its original bright condition.

Since the coins fell out of the jug at the moment when it was lifted, it was impossible to determine their stratification or to discover whether the latest coins lay at the top, but it is on the face of things unlikely that they had always been stored in the same receptacle. At the same time, the jug must be regarded as a receptacle for storing savings, into which its owners had dropped *aurei* as they accrued; as, in fact, a growing bank deposit account, rather than as a utensil hastily picked up by

a fugitive preparing to make off with his cash. Discussion² has turned round the question whether the jug and its contents do or do not constitute "treasure trove," and—the same question in another form—whether the jug of coins was purposely buried or was accidentally dropped on or near the spot where it was found. Whatever be the answer, it is indubitable that we have to deal with a hoard that had for many years been accumulating and been safely guarded and therefore concealed; though whether the place of its original concealment was the place of its recent discovery is incapable of strict proof.

The historical importance of the hoard lies in the fact that its successive owners continued to add to it down to the year 160–162, and that at that time savings ceased to be added to it and the hoard was itself abandoned. Whether the jug was left where it had stood below the floor of a house and the house above it destroyed, or whether it was taken up from its hiding-place and dropped in a hurried flight, matters little. In either case it furnishes evidence of danger threatening Corstopitum in 160–162 A.D. That troubles at this time overshadowed Northern Britain is well known. Literary allusions to the province, other discoveries made at Corstopitum, and other coin-finds made in the Mural district, and various inscriptions, show that clearly enough.

(1) There occurred at some time during the reign of Pius (138–161) a revolt of the Brigantes. The geographer Pausanias states that Pius took away a large portion of their territory because they had begun to invade the territory of the Genunians, who were tributary to the Romans.³

² See below, p. 277.

³ Ἀπετέμετο δὲ καὶ τῶν ἐν Βριττανίᾳ Βριγάντων τὴν πολλήν, ὅτι ἐπεσβαίνειν καὶ οὗτοι σὺν ὅπλοις ἤρξαν ἐς τὴν Γενουνίαν μοῖραν, ὑπηκόους Ῥωμαίων.

This step used generally to be connected with the conquest of Southern Scotland about 140 A.D. by Lollius Urbicus, in the earlier part of the reign of Pius; but discoveries made in 1903 have shown that it belongs rather to the governorship of Cn. Julius Verus (about 157-160), and that there was a widespread revolt in Northern Britain at the time.⁴ Verus does not seem to have succeeded in quelling it. When Marcus mounted the throne in 161, a British war was in progress, and Calpurnius Agricola was despatched, probably in 162 or 163, to deal with it.⁵ Presumably he was successful; certainly we hear of no further British troubles till about 180.

(2) Other discoveries made at Corstopitum on the site of two buildings point to troubles overtaking the place at this period. Coins and pottery unite in fixing the commencement of work upon "Site XI"—probably a great store-house—as subsequent to 140 A.D. The

Pausanias VIII, xliii. 4. What exactly τὴν Γενουρίαν μοῖραν means, and where it was, is unknown. The idea mentioned by Mommsen (*rom. Gesch.* v. 172 n.) that it was Vinovia (Binchester) is not very probable.

⁴ For details, see Haverfield, *Journal of the Derbyshire Archaeol. Society*, xxvi. (1904); *Archaeologia Aeliana*, xxv. (1904) 142; and *Proceedings of the Soc. of Antiquaries of Scotland*, xxxviii. 454. His conclusions have been generally accepted, and further evidence from Scotland has been adduced by Dr. G. Macdonald, *Roman Wall in Scotland*, pp. 9, 398.

⁵ *Hist. Aug.*, vita Marci 8: *imminebat etiam Britannicum bellum . . . et adversus Brittanos quidem Calpurnius Agricola missus*. The date of his governorship is not known exactly. Julius Verus was seemingly succeeded by Statius Priscus, but he had left by 163 and is usually assigned to the years 161-2. On the other hand, Agricola saw service in Germany at some date after 166 and before 170. In the passage quoted from the *Historia Augusta*, he is coupled with one Aufidius Victorinus who was sent to Germany, apparently, when Agricola went to Britain, and we know that this Aufidius was probably in Germany in 162. Probably, therefore, Agricola came to Britain about 162, and stayed two or three years.

ground-plan was barely completed, and work therefore cannot have been proceeding for more than two or three years, when building was discontinued, and the edifice, planned upon an exceptionally large scale, was left unfinished. Excavations at the north-west corner of the building have revealed marked signs of second-century occupation over-lying the foundations of the unfinished building. Archaeological evidence, therefore, points to the commencement and sudden discontinuance of this great work as alike occurring about the middle of the second century, and as falling within the reign of Pius—that is, before 161 A.D. The date of the destruction of the pottery-store is perhaps more open to question; yet the character of the Samian potsherds with which its floor was strewn suggests a date about or shortly after the middle of the second century, and the occurrence of a coin of Pius, of the year 152, embedded in its clay floor, points in the same direction.⁶

Finally, the well-cut slab with the erased dedicatory inscription SOLI INVICTO, erected by Calpurnius Agricola and discovered during the past season (1911) at Corstopitum, points to the erection of new buildings of architectural pretensions during the governorship of Calpurnius, at a time when quiet had presumably been restored.

(ii.) CORBRIDGE FOURTH-CENTURY HOARD.

Besides the gold find made in 1911, the excavations at Corstopitum have yielded a hoard of gold coins of later date. This was discovered in September, 1908, and has

⁶ Haverfield, *Proceedings of the London Society of Antiquaries*, 2nd Series, vol. xxiii. p. 118.

been described in the report on the excavations for that year (*Archaeologia Aeliana*, 3rd series, vol. v); it may be noticed again here, since no description of it has yet been given in the *Numismatic Chronicle*. It was found in the disused furnace of a building of mean construction and very late Roman date. Close to the very end of the Roman occupation, but before the deposit of the hoard, the floor of this building had been raised to the level of the top of the furnace, leaving the latter as a convenient hiding-place below the floor level. The treasure was wrapped up in a piece of leaden sheeting, and comprised forty-eight *aurei solidi* and a gold ring with small round loop and large bezel from which the stone was wanting.

The coins belonged to the following emperors:—Valentinian I, 4; Valens, 2; Gratian, 16; Valentinian II, 8; Theodosius, 5; Magnus Maximus, 13. Three types of reverse are represented, namely, VICTORIA AVGG (33 specimens), RESTITVTOR REIPVBLICAE (14 specimens), PRINCIPIVM IVVENTVTIS (1 specimen). The somewhat rarer type of VOTA PVBLICA is not represented in the hoard. The PRINCIPIVM IVVENTVTIS coin of Gratian is from the Constantinople mint; two of the four coins of Valentinian I are from the Roman mint; one *aureus* of Gratian and one of Theodosius are stamped COM without further specification of the place of minting; the remaining forty-three *aurei* were minted at Trier. Thus forty-three out of forty-eight examples are the product of a single mint. Three *officinae* were in operation at Trier up to the revolt of Maximus in 383, and their respective mint-marks were TROBC, TROBS, TROBT. The number of examples from each are eleven, four, and fifteen respectively.

An edict issued by Constantine in 312, and renewed by Valentinian I in 365, established the weight of the *aureus solidus* at 4·55 grammes (= 70·22 grains). With the exception of the Constantinople *aureus*, which weighs 82·2 grains, and an *aureus* of Maximus weighing 70·4 grains, all the coins in this hoard fall below the standard weight, and vary from 67·7 to 70·0 grains. This lightness of weight is not due to wear, since all the coins are fresh and in good condition, but is a general characteristic of late Roman gold coinage. One of the coins of Gratian (No. 23 on the list) is a contemporary forgery and weighs 67·3 grains only.

As the larger Corbridge hoard, described above, has for its starting-point the Neronian "reformation" of the gold coinage in 64 A.D., so this find commences with Valentinian's reform of 365 A.D. It terminates after the accession of Maximus in 383, but, as it contains no example of the Trier mint-mark $\begin{smallmatrix} T & | & R \\ \hline COM \end{smallmatrix}$ in use after 388, the hoard may be assigned to the reign of Maximus, and may be approximately dated to 385–387 A.D. Corstopitum has yielded copper coins with the SALVS REIPVBLICAE reverse—a type in use between 392 and 395—and the life of the place must consequently have been prolonged for five or ten years after the deposit of the Corbridge find. Nevertheless, this hoard remains one of the last vestiges of the Roman occupation of Northern Britain.

Both the Corbridge finds were claimed for the Crown under the law of Treasure Trove. The claim was disputed by the Duke of Northumberland, who, as lord of the manor of Corbridge, asserted his right, under an ancient grant, to treasure trove found within the limits of his manor. This claim was, however, withdrawn in

the month of January last (1912) as the result of proceedings instituted by the Crown in the Court of Chancery, and the two hoards have since then been handed over by the Lords of the Treasury to the Trustees of the British Museum. The Trustees have very wisely determined to retain both hoards intact, and they now form separate collections in the Department of Coins and Medals.

Mr. H. A. Grueber, of the Museum, has been kind enough to weigh the coins of the two Corbridge hoards, to supply notes of coins in the National Collection which illustrate the Corbridge Second-Century Find, and to give other valuable help and advice. The eight plates of coins from the Second-Century Find illustrating this paper have been prepared by the Oxford University Press. Twenty-six coins in the hoard are left unillustrated, being duplicates of specimens figured. In the ensuing catalogue references are given in every case to the plate upon which each coin is figured. The coins are arranged, so far as it was possible, in chronological order.

DESCRIPTION OF THE COINS.

(i.) CORBRIDGE SECOND-CENTURY HOARD.

NERO.

54-68 A.D.

1. *Obv.*—NERO CAESAR Head of Nero r., laureate.

Rev.—AVGVSTVS GERMANICVS Nero radiate, standing facing, holding laurel branch and Victory.

Wt. 111.6 grs. Cohen,⁷ p. 281, 44
(64-68 A.D.). [Pl. XII. 1.]

2. *Obv.*—NERO CAESAR AVGVSTVS Head of Nero r., laureate.

Rev.—AVGVSTVS AVGVSTA Augustus standing l., radiate, holding patera and sceptre,⁸ and Livia standing l., veiled, holding patera and cornucopiae.

Wt. 111.5 grs. Cohen, p. 281, 42
(64-68 A.D.). [Pl. XII. 2.]

3. *Obv.*—Similar.

Rev.—CONCORDIA AVGVSTA Concordia seated l., holding patera and cornucopiae.

Wt. 111.5 grs. Cohen, p. 283, 66
(64-68 A.D.). [Pl. XII. 3.]

4. *Obv.*—Similar.

Rev.—SALVS in exergue. Salus seated l., holding patera.

Wt. 110.5 grs. Cohen, p. 300, 313
(64-68 A.D.). [Pl. XII. 4.]

⁷ Unless otherwise mentioned, the references are to the second edition of Cohen's *Monnaies frappées sous l'Empire Romain*.

⁸ Cohen incorrectly reverses the order of the objects.

5-9. *Obv.*—Similar.

Rev.—IVPPITER CVSTOS Jupiter seated l., holding thunderbolt and sceptre.⁹

Wt. 110·4 (2), 110·0, 109·6, 108·4 grs.
Cohen, p. 287, 118 (64-68 A.D.).

[Pl. XII. 5.]

10. *Obv.*—IMP NERO CAESAR AVGVSTVS Head of Nero r., laureate.

Rev.—IVPPITER CVSTOS Similar to Nos. 5-9.

Wt. 111·3 grs. Cohen, p. 288, 120
(64-68 A.D.).

[Pl. XII. 6.]

GALBA.

68-69 A.D.

11. *Obv.*—IMP SER GALBA CAESAR AVG P M Head of Galba r., laureate.

Rev.—IMP in exergue. Galba on horseback galloping r., raising r. hand.¹⁰

Wt. 108·0 grs. Cohen, p. 326, 96
(68-69 A.D.).

[Pl. XII. 7.]

12-13. *Obv.*—IMP SER GALBA AVG Head of Galba r., bare.

Rev.—SPQR · OBCS (in two lines) within oak wreath.¹¹

Wt. 111·0 grs. Cohen, p. 338, 286
(68-69 A.D.).

[Pl. XII. 8, 9.]

⁹ These five specimens are all from different dies.

¹⁰ Cohen (*loc. cit.*) derives his knowledge of this type from Caylus, but there is another specimen in the British Museum, struck from different dies from the Corbridge example. The *aurei* of this fabric were minted in Gaul.

¹¹ These two coins are from different dies.

OTHO.

69 A.D.

14. *Obv.*—IMP M OTHO CAESAR AVG TR P Head of Otho r., bare.

Rev.—PAX ORBIS TERRARVM Pax standing l., holding olive-branch and caduceus.

Wt. 110·0 grs. Cohen, p. 352, 2
(69 A.D.). [Pl. XII. 10.]

15–16. *Obv.*—Similar.

Rev.—SECVRITAS P R Securitas standing l., holding wreath and sceptre.¹²

Wt. 110·2, 110·0 grs. Cohen, p. 353, 16
(69 A.D.). [Pl. XII. 11, 12.]

VITELLIUS AND LUCIUS VITELLIUS.

69 A.D.

17 *Obv.*—A VITELLIVS · GERMAN IMP TR P Head of Vitellius r., laureate.

Rev.—L VITELLIVS COS III CENSOR Draped bust of L. Vitellius r., laureate, before him a sceptre surmounted by an eagle.¹³

Wt. 110·0 grs. Cohen, p. 367, 3
(69 A.D.). [Pl. XII. 13.]

¹² Cohen (*loc. cit.*) borrows his description of this type from Caylus. There is a specimen in the British Museum, and another in the Valtou Collection, Bibl. Nat., Paris (*Rev. Num.*, 1912, p. 57). The two Corbridge specimens are from different dies. On the first example the wreath is of oak leaves; on the second, it is of laurel.

¹³ Of this coin, representing the Emperor Vitellius and his father Lucius Vitellius, Cohen mentions only the specimen formerly in the Blacas Collection and now in the British Museum.

VESPASIAN.

69-79 A.D.

18. *Obv.*—IMP CAESAR VESPASIANVS AVG Head of
Vespasian r., laureate.

Rev.—COS ITER TR POT Female figure seated l.,
holding branch and caduceus.

Wt. 111.2 grs. Cohen, 1st edition,
p. 274, 35 (70 A.D.). [Pl. XII. 14.]

19. *Obv.*—IMP CAESAR VESPASIANVS AVG TR P Head
of Vespasian r., laureate.

Rev.—COS ITER TR POT Neptune standing l., r.
foot on prow of vessel, and holding dolphin
and sceptre.

Wt. 112.0 grs. Cohen, p. 375, 92 (70
A.D.). [Pl. XII. 15.]

20. *Obv.*—IMP CAESAR VESPASIANVS AVG Head of
Vespasian r., laureate.

Rev.—COS III TR POT Aequitas standing l., hold-
ing scales and sceptre.¹⁴

Wt. 111.7 grs. Cohen, p. 376, 101
(71 A.D.). [Pl. XII. 16.]

21. *Obv.*—Similar.

Rev.—TR POT COS III Similar.¹⁵

Wt. 111.0 grs. Cohen, p. 410, 548
(71 A.D.). [Pl. XII. 17.]

- 22-23. *Obv.*—IMP CAES VESPAS AVG P M TR P IIII P P
COS IIII Head of Vespasian r., laureate.

¹⁴ Cohen (*loc. cit.*) mentions only a specimen in M. Rollin's Collection, but there is another example in the British Museum. The *aurei* of this fabric were minted in Gaul.

¹⁵ This type, a variant of the last, is likewise a product of a Gallic mint.

Rev.—PACI AVGVSTI Nemesis walking r., holding caduceus in l. hand, before her feet a serpent.¹⁶

Wt. 111·0, 111·7 grs. Cohen, p. 389,
284 (72 A.D.). [Pl. XIII. 1, 2.]

24. *Obv.*—IMP CAES VESP AVG P M COS IIII Head of Vespasian r., laureate.

Rev.—VIC AVG (in field). Victory standing on globe r., holding wreath and palm.

Wt. 109·1 grs. Cohen, p. 413, 586
(72–73 A.D.) [Pl. XIII. 3.]

25. *Obv.*—IMP CAES VESP AVG P M Head of Vespasian r., laureate.

Rev.—NEP RED Neptune standing l., r. foot on globe, holding acrostolium and sceptre.

Wt. 110·0 grs. Cohen, p. 388, 272
(72–73 A.D.) [Pl. XIII. 4.]

26. *Obv.*—IMP CAES VESP AVG CEN Head of Vespasian r., laureate.

Rev.—VESTA Temple of Vesta with four columns and flight of steps up, a statue in the interior and two flanking the temple.

Wt. 110·4 grs. Cohen, p. 413, 578
(72–73 A.D.) [Pl. XIII. 5.]

27. *Obv.*—IMP CAESAR VESPASIANVS AVG (from r. to l.). Head of Vespasian r., laureate.

Rev.—COS VI (in exergue). Bull advancing r. with head lowered.

Wt. 111·4 grs. Cohen, 1st edition,
p. 276, 54 (75 A.D.). [Pl. XIII. 6.]

¹⁶ These two coins are from different dies.

28-30. *Obv.*—IMP CAESAR VESPASIANVS AVG (from r. to l.). Head of Vespasian l., laureate.

Rev.—AETERNITAS Aeternitas standing l., holding heads of Sol and Luna, before her feet a lighted altar.¹⁷

Wts. 109·6, 109·3, 108·5 grs. Cohen, p. 370, 23 (75-79 A.D.). [Pl. XIII. 7.]

31. *Obv.*—IMP CAESAR VESPASIANVS AVG (from r. to l.). Head of Vespasian r., laureate.

Rev.—TR POT X COS VIII Woman with mural crown, standing r., holding spear and fruit.¹⁸

Wt. 110·4 grs. Cohen, p. 411, 557 (78 A.D.). [Pl. XIII. 8.]

32. *Obv.*—DIVVS AVGVSTVS VESPASIANVS (from r. to l.). Head of Vespasian r., laureate.

Rev.—EX (in field); SC on buckler leaning against funereal column surmounted by an urn, on each side a palm-branch.¹⁹

Wt. 113·0 grs. Cohen, p. 378, 148 (79 A.D.). [Pl. XIII. 9.]

TITUS.

71-81 A.D.

33. *Obv.*—T CAES IMP VESP PON TR POT Head of Titus r., laureate.

Rev.—VIC AVG (in field). Similar to No. 24.

Wt. 109·3 grs. Cohen, p. 457, 352 (72-73 A.D.). [Pl. XIII. 10.]

¹⁷ The reverses of Nos. 28, 29, are from the same die, but all three specimens are from the same obverse die. Cohen (*loc. cit.*) cites an example from the *Trouvaille du Lycée Napoléon*. There is also a specimen in the British Museum, and another in the Valton Collection (*Rev. Num.*, 1912, p. 9).

¹⁸ Cohen (*loc. cit.*) takes his description of this type from Caylus.

¹⁹ On this specimen the shield is blank, the die having been blurred, or rather, the letters have been effaced by wear.

34. *Obv.*—T CAES IMP VESP CENS (from r. to l.).
Head of Titus r., laureate.

Rev.—PONTIF TRI POT (from r. to l.). Titus
seated r., holding sceptre and branch.

Wt. 111.6 grs. Cohen, p. 443, 168
(73–75 A.D.). [Pl. XIII. 11.]

35. *Obv.*—T CAESAR IMP VESPASIANVS (from r. to l.).
Head of Titus r., laureate.

Rev.—COS \bar{V} (in field). Heifer r.²⁰

Wt. 109.8 grs. Cohen, p. 433, 53
(76 A.D.). [Pl. XIII. 12.]

36. *Obv.*—T CAESAR IMP VESPASIANVS . (from r. to l.).
Head of Titus r., laureate.

Rev.—AETERNITAS Similar to Nos. 28–30.²¹

Wt. 111.3 grs. Cohen, 1st edition,
p. 342, 1 (75–79 A.D.). [Pl. XIII. 13.]

- 37–38. *Obv.*—T CAESAR VESPASIANVS (from r. to l.).
Head of Titus r., laureate.

Rev.—ANNONA AVG Annona seated l., holding
ears of corn (?) in r. hand, l. arm resting on
arm of chair.²²

Wts. 110.2, 110.7 grs. Cohen, p. 430,
16 (75–79 A.D.). [Pl. XIII. 14.]

39. *Obv.*—IMP TITVS CAES VESPASIAN AVG P M (from
r. to l.). Head of Titus r., laureate.

²⁰ This type is known to Cohen only from the old catalogues of the *Cabinet de France*. There is, however, a specimen in the British Museum from the Royal (Geo. III.) Collection. The heifer has been recognized as the masterpiece in bronze by Myron, which was placed in the Acropolis at Athens and which later was brought to Rome by Vespasian and placed in the Forum Pacis (*B. M. Cat.: Rom. Coins*, vol. ii. p. 543).

²¹ The reverse is from the same die as No. 30.

²² These two specimens are from different dies.

Rev.—TR P VIII IMP XIII COS VII P P Venus standing r. with back turned, holding helmet and spear; her l. arm rests on a column.

Wt. 111.6 grs. Cohen, p. 452, 267
(79 A.D.). [Pl. XIII. 15.]

40. *Obv.*—Similar.

Rev.—Same legend. A capricorn l.; below it, a globe.²³

Wt. 111.5 grs. Cohen, p. 452, 279
(79 A.D.). [Pl. XIII. 16.]

41. *Obv.*—Similar.

Rev.—TR P VIII IMP XV COS VII P P Triumphal quadriga l.; in the car, a flower.²⁴

Wt. 109.6 grs. Not in Cohen (79 A.D.).
[Pl. XIII. 17.]

42. *Obv.*—Similar.

Rev.—TR P IX IMP XV COS VIII P P Winged thunderbolt on throne.

Wt. 110.4 grs. Cohen, p. 455, 315
(Jan.—June, 80 A.D.). [Pl. XIV. 1.]

43. *Obv.*—Similar.

Rev.—Same legend. Dolphin over a tripod.

Wt. 109.5 grs. Cohen, p. 455, 320
(Jan.—June, 80 A.D.). [Pl. XIV. 2.]

²³ Cohen (*loc. cit.*) borrows his description from Caylus.

²⁴ Cohen (p. 453, 292) gives this type in silver. *Aurei* of this design have been hitherto unrecorded. There is, however, a specimen in the British Museum from the Royal Collection.

DOMITIAN.

71-96 A.D.

44-45. *Obv.*—CAES AVG F DOMIT COS II (from r. to l.).
Head of Domitian r., laureate.

Rev.—No inscription. Domitian on horseback
galloping l., raising r. hand and holding
sceptre in l.²⁵

Wts. 111.4, 111.0 grs. Cohen, p. 524,
663 (73 A.D.). [Pl. XIV. 3.]

46. *Obv.*—CAESAR AVG F DOMITIANVS (from r. to l.).
Head of Domitian r., laureate.

Rev.—COS V (in exergue). Sarmatian kneeling r.,
holding up ensign.

Wt. 112.4 grs. Cohen, p. 474, 48
(76 A.D.). [Pl. XIV. 4.]

47-48. *Obv.*—Similar.

Rev.—COS V (in field). Wolf l., suckling Romulus
and Remus; below, a crib.²⁶

Wts. 110.9, 109.0 grs. Cohen, p. 474,
50 (76 A.D.). [Pl. XIV. 5, 6.]

TRAJAN.

98-117 A.D.

49. *Obv.*—IMP CAES NERVA TRAIAN AVG GERM Head
of Trajan r., laureate.

²⁵ These two specimens are from different dies.

²⁶ These two specimens are from different dies. The inscription on the obverse of No. 48 reads CAESAR AVG F. DOMITIANVS. An aureus of this type was formerly found at Corstopitum, and is now in the Duke of Northumberland's coin cabinet at Alnwick Castle (Bruce *Lapidarium Septentrionale*, p. 330 note).

Rev.—P · M · TR · P · COS · II · P · P Fortune standing l., holding rudder on prow of vessel in r. hand, and cornucopiae in l.

Wt. 110·9. Cohen, p. 40, 205 (98–99 A.D.). [Pl. XIV. 7.]

50. *Obv.*—Same legend. Bust of Trajan r., laureate.

Rev.—P · M · TR · P · COS · II · P · P Germania seated l. on pile of shields, holding olive-branch in r. hand and resting l. arm on shield.

Wt. 113·9. Cohen, p. 40, 207 (98–99 A.D.). [Pl. XIV. 8.]

51. *Obv.*—Similar to No. 50.

Rev.—P · M · TR · P · COS · III · P · P Hercules standing facing on a cippus, holding club and lion-skin.

Wt. 111·4. Cohen, p. 41, 215 (100 A.D.). [Pl. XIV. 9.]

52. *Obv.*—Similar to No. 49.²⁷

Rev.—P · M · TR · P · COS · III · P · P Similar.

Wt. 111·1. Cohen, p. 41, 215 (100 A.D.). [Pl. XIV. 10.]

53–55. *Obv.*—Similar to No. 50.

Rev.—P · M · TR · P · COS · IIII · P · P Similar to Nos. 51 and 52.²⁸

Wts. 107·0, 105·3, 110·4. Cohen, p. 43, 232 (100–103 A.D.). [Pl. XIV. 11, 12.]

²⁷ In the present catalogue the portrait on the obverse is described as *bust* when the folds of the toga (sometimes described by Cohen as the aegis) are seen over the left shoulder, and as *head* where the drapery is absent. Cohen gives this type with head only on the obverse. The present hoard furnishes examples both of head (No. 52) and bust (No. 51).

²⁸ These specimens are from different dies, and the reverses show minor varieties of lettering, namely—

P · M TR P · COS · IIII · P · P (No. 53).

P · M · TR · P · COS · IIII · P · P (No. 54).

P · M · TR · P COS · IIII · P · P (No. 55).

56. *Obv.*—Similar to No. 49.

Rev.—P · M · T · R · P · COS · IIII · P · P Trajan standing facing, holding spear and parazonium, being crowned by Victory, who holds palm in l. hand.²⁹

Wt. 109·5 grs. Cohen, p. 44, 253 (100–103 A.D.). [Pl. XIV. 13.]

57. *Obv.*—Similar to No. 50.

Rev.—P · M · TR · P · COS · IIII · P · P Similar to No. 56.

Wt. 112·4 grs. Cohen, p. 44, 251 (100–103 A.D.). [Pl. XIV. 14.]

58. *Obv.*—Same legend. Draped bust of Trajan r., laureate.³⁰

Rev.—Similar.

Wt. 113·6 grs. Var. of Cohen, p. 44, 251 (100–103 A.D.). [Pl. XIV. 15.]

59. *Obv.*—Similar.

Rev.—P · M · TR · P COS IIII P · P Trajan standing l., with mantle over l. arm and holding spear in l. hand, erecting a trophy on a Dacian, upon whom he rests his r. foot.³¹

Wt. 109·5 grs. Var. of Cohen, p. 44, 254 (100–103 A.D.). [Pl. XIV. 16.]

60. *Obv.*—IMP NERVA TRAIANVS AVG GER · DACICVS
Bust of Trajan r., laureate.

²⁹ Cohen (*loc. cit.*) gives this type from the *Trouvaille du Lycée Charlemagne*. There are two specimens of it in the British Museum.

³⁰ This type of obverse is not given in Cohen.

³¹ Cohen (*loc. cit.*) gives a specimen in the *Cabinet de France*, having on the obverse the laureate bust with the "aegis." The present variety, having laureate and draped bust on the obverse, is unrecorded by Cohen, but an example of it, from the Montagu Collection, is in the British Museum.

Rev.—P · M · TR · P · COS · V · P · P Dacia seated r. on rock, resting head on l. arm, below a curved sword.³¹

Wt. 111·2 grs. Cohen, p. 45, 259 (104 A.D.). [Pl. XIV. 17.]

61. *Obv.*—IMP TRAIANO AVG GER DAC P M TR P
Draped and cuirassed bust of Trajan r., laureate.

Rev.—COS V P P SPQR OPTIMO PRINC Libertas standing l., holding cap and sceptre.

Wt. 111·0 grs. Cohen, p. 26, 70 (104–111 A.D.). [Pl. XV. 1.]

62–63. *Obv.*—Similar.

Rev.—Same legend. Arabia standing l., holding branch and reed (?); at her feet a camel.³²

Wts. 113·0, 108·2 grs. Cohen, p. 27, 88 (104–111 A.D.). [Pl. XV. 2, 3.]

64. *Obv.*—Similar.

Rev.—COS · V · P · P S · P · Q · R · OPTIMO PRINC
Trajan advancing r., raising r. hand and holding spear.³⁴

Wt. 111·0 grs. Cohen, p. 27, 91 (104–111 A.D.). [Pl. XV. 4.]

65–66. *Obv.*—Similar.

Rev.—COS V P P S · P · Q · R · OPTIMO PRINC
Eagle on thunderbolt looking l.³⁵

Wts. 110·4, 108·8 grs. Cohen, p. 28, 96 (104–111 A.D.). [Pl. XV. 5.]

³² Cohen (*loc. cit.*) mentions only a specimen in M. Rollin's collection.

³³ These two coins are from different dies.

³⁴ Cohen (*loc. cit.*) borrows his description from Caylus, and inaccurately describes the obverse as laureate and cuirassed bust in place of laureate draped and cuirassed bust. There is a specimen in the British Museum similar to this example.

³⁵ The reverses of these two specimens are from the same die.

67-70. *Obv.*—Similar.

Rev.—COS · V · P · P · S · P · Q · R · OPTIMO PRINC
Ceres standing l., holding ears of corn and
torch.³⁶

Wts. 111·8, 109·6, 112·0, 111·4 grs.
Cohen, p. 25, 65 (104-111 A.D.).
[Pl. XV. 6, 7.]

71. *Obv.*—Similar.

Rev.—COS V P P S P Q R OPTIMO PRINC (in four
lines) within oak wreath.

Wt. 111·6 grs. Cohen, p. 28, 101 (104-
111 A.D.). [Pl. XV. 8.]

72. *Obv.*—Similar.

Rev.—COS V P P S P Q R OPTIMO PRINC In
exergue ALIM · ITAL Trajan standing l.,
distributing food to two children.

Wt. 109·6 grs. Cohen, p. 19, 15 (104-
111 A.D.). [Pl. XV. 9.]

73-74. *Obv.*—IMP TRAIANO AVG GER DAC P M TR P COS
V P P Draped and cuirassed bust of
Trajan r., laureate.

Rev.—S · P · Q · R OPTIMO PRINCIPI (in three
lines) within oak wreath.³⁷

Wts. 111·5, 110·0 grs. Cohen, p. 78,
581 (104-111 A.D.). [Pl. XV. 10.]

³⁶ These four specimens are all from different dies. They exhibit two varieties of lettering on the obverse, viz.: IMP TRAIANO AVG GER DAC P M TR P (on Nos. 68 and 69) and IMP · TRAIANO AVG GER DAC P M TR P (on Nos. 67 and 70). Cohen takes his description from Caylus. The type is, however, represented in the British Museum.

³⁷ These two coins are from different dies.

75. *Obv.*—Similar.

Rev.—S · P · Q · R · OPTIMO PRINCIPI Trajan standing l., placing r. hand on knee and holding sceptre in l., resting r. foot on head of a Dacian.³⁸

Wt. 112·6 grs. Var. of Cohen, p. 69, 511
(104–111 A.D.). [Pl. XV. 11.]

76. *Obv.*—Same legend. Head of Trajan r., laureate.

Rev.—Similar to No. 75.

Wt. 111·0 grs. Cohen, p. 69, 511 (104–111 A.D.). [Pl. XV. 12.]

77. *Obv.*—Same legend. Bust of Trajan r., laureate.

Rev.—S P Q R OPTIMO PRINCIPI Trajan driving in four-horsed chariot l., holding branch and sceptre.³⁹

Wt. 112·0 grs. Var. of Cohen, p. 67, 493
(104–111 A.D.). [Pl. XV. 13.]

78. *Obv.*—Similar.

Rev.—Same legend. Trajan on horseback galloping r., holding spear in r. hand and trampling on an enemy.⁴⁰

Wt. 111·6 grs. Var. of Cohen, p. 68, 501
(104–111 A.D.). [Pl. XV. 14.]

79. *Obv.*—IMP TRAIANO AVG GER DAC P M TR P COS VI P P Draped and cuirassed bust of Trajan r., laureate.

³⁸ This type with draped bust on obverse is new. The next specimen, with laureate head on obverse, is known to Cohen only through Caylus.

³⁹ Cohen mentions a specimen of this reverse in the *Cabinet de France* with laureate and draped bust on the obverse. An example of the present variety having a laureate bust with "aegis" on the obverse, from the Royal Collection, is in the British Museum.

⁴⁰ Cohen catalogues a specimen in the *Cabinet de France* having this reverse and laureate and draped bust on the obverse, but does not record the present variety, neither is it represented in the British Museum.

Rev.—S · P · Q · R · OPTIMO PRINCIPI Three standards surmounted respectively by a hand, an eagle, and a wreath.

Wt. 111·6 grs. Cohen, p. 77, 576 (112–113 A.D.). [Pl. XV. 15.]

80. *Obv.*—Similar.

Rev.—Same legend. Genius standing l., holding patera and ears of corn.

Wt. 112·4 grs. Cohen, p. 59, 397 (112–113 A.D.). [Pl. XV. 16.]

81. *Obv.*—Similar.

Rev.—Same legend. Column surmounted by statue of Trajan, at its base two eagles.⁴¹

Wt. 110·6 grs. Var. of Cohen, p. 76, 557 (112–113 A.D.). [Pl. XV. 17.]

82. *Obv.*—IMP TRAIANVS AVG GER DAC P M TR P COS VI P P Draped and cuirassed bust of Trajan r., laureate.

Rev.—DIVVS · PATER · TRAIANVS Draped bust of Trajanus pater r., bare.⁴²

Wt. 112·9 grs. Cohen, p. 103, 2 (114 A.D.). [Pl. XVI. 1.]

83. *Obv.*—IMP TRAIANO AVG GER DAC P M TR P COS VI P P Draped and cuirassed bust of Trajan r., laureate.

Rev.—FORVM TRAIAN (in exergue). Building with six columns and central door; on the top

⁴¹ Cohen records an example of this reverse, with laureate bust on the obverse, as being in the British Museum. He probably alludes to an *aureus* from the Royal Collection; but this has a laureate draped and cuirassed bust on the obverse, and therefore is similar to the present specimen.

⁴² Cohen mentions only a specimen formerly in the possession of M. Herpin. There are, however, two specimens in the British Museum from the de Salis and Blacas collections respectively. They are struck from the same obverse dies, but those of the reverse vary.

of the pediment a quadriga led by two soldiers in which is Trajan holding laurel-branch and crowned by Victory; on either side of the chariot a trophy and Victory; statues in niches and medallions between the columns.⁴³

Wt. 112·2 grs. Cohen, p. 35, 167 (114 A.D.). [Pl. XVI. 2.]

84. *Obv.*—IMP CAES NER TRAIANO OPTIMO AVG GER DAC Draped and cuirassed bust of Trajan r., laureate.

Rev.—P M TR P COS VI P P S P Q R Similar design to No. 80.

Wt. 110·2 grs. Cohen, p. 46, 275 (114–116 A.D.). [Pl. XVI. 3.]

85–89. *Obv.* Similar.

Rev.—P M TR P COS VI P P S P Q R In exergue, FORT RED Fortuna seated l., holding rudder and cornucopiae.⁴⁴

Wts. 112·6, 112·4, 109·6, 110·6, 109·6. Cohen, p. 34, 153 (114–116 A.D.). [Pl. XVI. 4, 5, 6.]

90. *Obv.*—Similar.

Rev.—P M TR P · COS VI P P · S P Q R In exergue, SALVS AVG Salus seated l., feeding serpent entwined round altar, and leaning l. arm on chair.

Wt. 112·0 grs. Cohen, p. 53, 331 (114–116 A.D.). [Pl. XVI. 7.]

⁴³ This specimen was found lying in loose soil on or near the spot where the jug containing the hoard had been found on the previous day, and doubtless belonged to it.

⁴⁴ All five specimens are from different dies. They exhibit three varieties of lettering on the reverse, viz.:

P M TR P COS VI P P S P Q R Nos. 85, 86, 87.

P M TR P COS · VI P P S · P Q R No. 88.

P M TR P COS · VI P P · S · P · Q · R No. 89.

91. *Obv.*—Similar.

Rev.—REGNA · ADSIGNATA Trajan seated l. on platform, a soldier standing before and behind him; in front of him three kings standing.

Wt. 112·0 grs.. Cohen, p. 51, 324 (116 A.D.). [Pl. XVI. 8.]

92–93. *Obv.*—IMP CAES NER TRAIAN OPTIM AVG GER DAC PARTHICO Draped and cuirassed bust of Trajan r., laureate.

Rev.—Similar to No. 91.⁴⁵

Wts. 110·6, 110·0 grs. Cohen, 1st edition, p. 34, 207 (116–117 A.D.). [Pl. XVI. 9.]

94. *Obv.*—Similar.

Rev.—P M TR P COS VI P P S · P · Q · R In exergue, PARTHIA CAPTA A trophy, seated at its base two Parthians, each holding a quiver with bow.

Wt. 110·2 grs. Cohen, p. 38, 184 (116–117 A.D.). [Pl. XVI. 10.]

95. *Obv.*—IMP CAES NER TRAIAN OPTIM AVG GERM DAC Draped and cuirassed bust of Trajan r., laureate.

Rev.—PARTHICO P M TR P COS VI P P S P Q R Draped bust of sun-god r., radiate.

Wt. 111·2 grs. Cohen, 1st edition, p. 18, 99 (116–117 A.D.). [Pl. XVI. 11.]

MARCIANA.

Died *circa* 114.

96. *Obv.*—DIVA AVGVSTA MARCIANA Draped bust of Marciana r., diademed.

Rev.—CONSECRATIO Eagle walking l. on sceptre and looking r.

Wt. 110·6 grs. Cohen, p. 100, 3 (114–117 A.D.). [Pl. XVI. 12.]

⁴⁵ The reverses of Nos. 91 and 93 are from the same die.

HADRIAN.⁴⁶

117-138 A.D.

97. *Obv.*—IMP CAES TRAIAN HADRIAN OPT AVG G · D
PART. Cuirassed bust of Hadrian r.,
laureate.

Rev.—DIVO TRAIANO · PATRI AVG Draped and
cuirassed bust of Trajan r., laureate.

Wt. 113·4 grs. Cohen, p. 245, 1 (117 A.D.).
[Pl. XVI. 13.]

98-100. *Obv.*—IMP CAESAR TRAIAN HADRIANVS AVG
Draped and cuirassed bust of Hadrian r.,
laureate.

Rev.—P M TR P COS III Jupiter standing facing,
holding thunderbolt and sceptre.⁴⁷

Wts. 108·4, 112·2, 109·6 grs. Cohen,
p. 193, 1058 (121 A.D.).
[Pl. XVI. 14, 15.]

101. *Obv.*—Similar.

Rev.—Similar, but Jupiter seated l.

Wt. 112·0 grs. Cohen, p. 194, 1060
(121 A.D.). [Pl. XVI. 16.]

⁴⁶ The chronology of the reign of Hadrian is largely conjectural. The coins of his reign are here arranged in the order suggested by Laffranchi (*Rivista Italiana di Numismatica*, 1906, pp. 329-374). Definite dates can, however, be perhaps assigned to the following groups of coins represented in this hoard:—

A.D. 117. *Obv.*—IMP CAES TRAIAN HADRIAN OPT AVG G · D
PART.

A.D. 119-124. *Obv.*—IMP CAESAR TRAIAN HADRIANVS AVG
Rev.—P M TR P COS III

A.D. 125-127. *Obv.*—HADRIANVS AVGVSTVS *Rev.*—COS III

A.D. 127-130. *Obv.*—HADRIANVS AVGVSTVS P P or HADRIANVS
AVGVSTVS with P P in reverse inscription.

A.D. 130-138. *Obv.*—HADRIANVS AVG COS III P P

⁴⁷ These three specimens are from different dies.

102. *Obv.*—Similar.

Rev.—P M TR P COS III In field, HERC GADIT
Hercules standing r., holding club and
apple, behind him the prow of a vessel,
before him the river-god Baetis.⁴⁸

Wt. 111.0 grs. Cohen, p. 174, 814
(122 A.D.). [Pl. XVI. 17.]

103. *Obv.*—Similar.

Rev.—P M TR P · COS III · Genius standing l.,
holding patera and ears of corn.⁴⁹

Wt. 110.3 grs. Cohen, p. 197, 1092
(123 A.D.). [Pl. XVII. 1.]

104–105. *Obv.*—Similar.

Rev.—P M TR P COS III Rome seated on cuirass
l., holding Victory and spear, below her
a helmet.⁵⁰

Wts. 113.0, 112.0 grs. Var. of Cohen,
p. 197, 1097 (123 A.D.).
[Pl. XVII. 2.]

106. *Obv.*—Same legend. Bust of Hadrian r., laureate.

Rev.—Same legend. Neptune standing l., holding
acrostolium and trident, mantle over l.
shoulder.⁵¹

Wt. 111.0 grs. Cohen, p. 195, 1079
(124 A.D.). [Pl. XVII. 3.]

⁴⁸ Cohen mentions only a specimen in the British Museum.

⁴⁹ Cohen mentions only a specimen in M. Rollin's collection, but there are two in the British Museum. These and the Corbridge specimens are all struck from the same reverse die, but each specimen varies in the obverse type.

⁵⁰ The reverses of these two specimens are from the same die. Cohen (*loc. cit.*) catalogues a similar specimen in the *Cabinet de France*, but does not record the helmet below the seated figure. He records (p. 198, 1104) an *aureus* of similar design from the *Trouvaille du Lycée Napoléon*, with the helmet and also with a shield behind the seated figure. The shield is absent from the present specimens.

⁵¹ Cohen records (*loc. cit.*) a similar specimen from the *Trouvaille du Lycée Napoléon*, with laureate head on the obverse. There is an example

107. *Obv.*—HADRIANVS AVGVSTVS Draped and cuirassed bust of Hadrian r., laureate.

Rev.—COS III Hadrian on horseback galloping r., holding spear.⁵²

Wt. 111.3 grs. Var. of Cohen, p. 141, 414 (126 A.D.). [Pl. XVII. 4.]

108–110. *Obv.*—Same legend. Bust of Hadrian r., laureate.

Rev.—COS (round edge) III (in exergue). Wolf r., suckling Romulus and Remus.⁵³

Wts. 111.0, 108.6, 111.0 grs. Cohen, p. 141, 420 (126 A.D.). [Pl. XVII. 5, 6.]

111. *Obv.*—Similar to No. 108.

Rev.—Similar, but wolf l.

Wt. 110.2 grs. Cohen, p. 141, 422 (126 A.D.). [Pl. XVII. 7.]

112. *Obv.*—Similar to No. 108.

Rev.—COS III Column surmounted by helmet, suspended from it a parazonium and spear; at its base a shield with Medusa's head as boss, a cuirass, and pair of greaves.⁵⁴

Wt. 111.4 grs. Cohen, p. 145, 473 (126 A.D.). [Pl. XVII. 8.]

in the British Museum. The portrait on the obverse of the present specimen is properly a bust, a loop of drapery being visible over the left shoulder.

⁵² This coin has a reverse of similar design to No. 115, from which it differs in the disposition of the legend on the reverse and the character of the bust on the obverse. Although unnoticed by Cohen, an example of this variety is in the British Museum.

⁵³ The reverses of Nos. 108 and 109 are from the same die.

⁵⁴ Cohen's description (*loc. cit.*) is taken from Caylus. The beautiful condition of the specimen makes it possible to correct Caylus' reproduction. The armour on the right of the base of the column is not a helmet, as given by him, but a pair of greaves. A Medusa's head ornaments the boss of the shield.

113-114. *Obv.*—Similar to No. 108.

Rev.—Same legend. Hadrian on horseback advancing r. and raising r. hand.⁵⁵

Wt. 111.7 grs. (2). Cohen, p. 140,
406 (127 A.D.). [Pl. XVII. 9.]

115. *Obv.*—Similar to No. 108.

Rev.—COS · III (in exergue). Similar design to No. 107.

Wt. 112.9 grs. Cohen, p. 141, 414
(127 A.D.). [Pl. XVII. 10.]

116. *Obv.*—Same legend. Bust of Hadrian r., bare-headed.

Rev.—COS III · P · P Hadrian in military dress standing l., raising r. hand and holding spear; before him two, behind him one standard surmounted respectively by a wreath, a hand and an ensign.⁵⁶

Wt. 110.4 grs. Cohen, p. 147, 485
(130 A.D.). [Pl. XVII. 11.]

117. *Obv.*—HADRIANVS AVG COS III P P Draped bust of Hadrian r., bare-headed.

Rev.—IVSTITIA AVG Justitia seated l., holding patera and sceptre.⁵⁷

Wt. 112.0 grs. Var. of Cohen, p. 180,
878 (130 A.D.). [Pl. XVII. 12.]

⁵⁵ These two specimens are from different dies.

⁵⁶ Cohen (*loc. cit.*) mentions only a specimen in Sig. Gneccchi's collection. There is, however, a duplicate from the same dies (*obv.* and *rev.*) in the British Museum.

⁵⁷ Cohen (*loc. cit.*) records an *aureus* of similar design in the British Museum, with bare head of Hadrian on the obverse. The present example has a draped bust on the obverse, and so constitutes a new variety. The present piece and that in the British Museum are struck from the same reverse die.

118. *Obv.*—Similar.

Rev.—ROMA AETERNA Rome, helmeted, seated l. on cuirass, holding in her r. hand heads of Sol and Luna, in her l. a spear, behind her a shield.

Wt. 110·0 grs. Cohen, p. 215, 1303
(131 A.D.). [Pl. XVII. 13.]

119. *Obv.*—Similar.

Rev.—IOVI VICTORI Jupiter seated l., holding Victory and sceptre.

Wt. 110·2 grs. Cohen, p. 178, 863
(131 A.D.). [Pl. XVII. 14.]

120–121. *Obv.*—Same legend. Bust of Hadrian r., laureate.

Rev.—VICTORIA AVG Victory advancing r., looking back, and holding wreath and palm.⁵⁸

Wts. 111·9, 110·0 grs. Var. of Cohen,
p. 227, 1453 (132 A.D.).
[Pl. XVII. 15.]

122. *Obv.*—Same legend. Head of Hadrian r., bare.

Rev.—Similar to Nos. 120, 121.

Wt. 112·0 grs. Cohen, p. 227, 1453
(132 A.D.). [Pl. XVII. 16.]

123. *Obv.*—Similar to No. 122.⁵⁹

Rev.—Same legend. Victory standing l., holding in her r. hand an eagle with wreath in his beak, in her l. a palm.

Wt. 112·0 grs. Cohen, p. 227, 1459
(132 A.D.). [Pl. XVII. 17.]

⁵⁸ An example of this type is in the British Museum, although unrecorded by Cohen. Both obverse and reverse of these two specimens, and of that already in the Museum, are from the same dies.

⁵⁹ Cohen describes the portrait on the obverse as a bust. No drapery, however, is visible in this specimen.

124. *Obv.*—Similar to No. 122.

Rev.—GENIO · P · R Genius standing l., with patera and cornucopiae, at his feet a lighted altar.

Wt. 111·4 grs. Cohen, p. 173, 800
(133 A.D.). [Pl. XVIII. 1.]

125–126. *Obv.*—Similar to No. 117.

Rev.—ADVENTVI AVG ITALIAE Hadrian standing r., raising r. hand and holding roll; facing him Italy standing l., holding patera and cornucopiae; between them a lighted altar.⁶⁰

Wts. 114·1, 112·7 grs. Cohen, p. 110,
42 (135 A.D.). [Pl. XVIII. 2, 3.]

127. *Obv.*—Same legend. Head of Hadrian l., bare.

Rev.—AEGYPTOS Egypt recumbent l., holding sistrum in r. hand, l. arm supported on basket; in front of her an ibis on altar.⁶¹

Wt. 113·7 grs. Cohen, p. 114, 96
(137 A.D.). [Pl. XVIII. 4.]

128. *Obv.*—Similar to No. 127.

Rev.—HISPANIA Spain recumbent l., holding olive-branch and resting l. arm on rock; in front of her a rabbit.

Wt. 107·7 grs. Cohen, p. 176, 828
(137 A.D.). [Pl. XVIII. 5.]

129–131. *Obv.*—Similar to No. 122.

Rev.—LIBERALITAS AVG · VII Liberalitas standing l., holding tessera and cornucopiae.⁶²

Wts. 110·4, 112·4, 113·0 grs. Cohen,
p. 183, 942 (137 A.D.).

[Pl. XVIII. 6.]

⁶⁰ These two coins are from different dies.

⁶¹ Cohen (*loc. cit.*) mentions only a specimen from the *Trouvaille du Lycée Charlemagne*.

⁶² All three specimens are from the same obverse die, and Nos. 129 and 130 are also from the same reverse die. Nos. 131 and 132 are from the same reverse die but from different obverse dies.

132. *Obv.*—Similar to No. 127.

Rev.—Similar to No. 129.⁶³

Wt. 111.1 grs. Cohen, p. 184, 944
(137 A.D.). [Pl. XVIII. 7.]

SABINA.

128–136 A.D.

133. *Obv.*—SABINA AVGVSTA Draped bust of Sabina
r., diademed, with hair in “queue.”

Rev.—IVNONI REGINAE Juno standing l. veiled,
holding patera and sceptre, at her feet a
peacock.⁶⁴

Wt. 110.4 grs. Cohen, p. 251, 46
(128–129 A.D.). [Pl. XVIII. 8.]

134. *Obv.*—Similar.

Rev.—VESTA Vesta seated l., holding palladium
and sceptre.

Wt. 112.4 grs. Cohen, p. 253, 78
(134–135 A.D.). [Pl. XVIII. 9.]

135. *Obv.*—SABINA AVGVSTA Draped bust of Sabina
r., diademed, coiffure relevée.

Rev.—Similar to No. 134.

Wt. 110.4 grs. Cohen, p. 253, 79
(134–135 A.D.). [Pl. XVIII. 10.]

⁶³ This coin is only known to Cohen through the medium of Caylus. There is, however, a specimen in the British Museum. The reverses of this specimen and of No. 181 are from the same die.

⁶⁴ Cohen mentions only a specimen in the British Museum. There are in fact two specimens there: one from the Cracherode Collection, the other from that of the Bank of England.

ÆLIUS.

136-137 A.D.

136. *Obv.*—L · AELIVS CAESAR Head of Aelius l., bare.

Rev.—TRIB POT COS II, in exergue CONCORD Concordia seated l., holding patera in r. hand, and resting l. arm on cornucopiae.

Wt. 112·4 grs. Cohen, p. 259, 12 (136 A.D.). [Pl. XVIII. 11.]

ANTONINUS PIUS.

138-161 A.D.

137. *Obv.*—IMP T AEL CAES HADRI ANTONINVS Head of Antoninus Pius r., bare.

Rev.—AVG PIVS · P M TR · P COS DES II Pietas standing r., veiled, raising r. hand and holding box of perfumes in l., at her feet a lighted altar.

Wt. 112·0 grs. Cohen, p. 277, 70 (138 A.D.). [Pl. XVIII. 12.]

138-139. *Obv.*—ANTONINVS AVG PIVS P P Head of Antoninus Pius r., bare.

Rev.—TR POT COS II Similar to No. 137, but Pietas stands l.⁶⁵

Wts. 111·6, 110·0 grs. Cohen, 1st edition, p. 313, 278 (139 A.D.). [Pl. XVIII. 13.]

140. *Obv.*—ANTONINVS AVG PIVS P P TR P COS III Draped and cuirassed bust of Antoninus Pius r., bare-headed.

⁶⁵ These two coins are duplicates, *i.e.* from the same dies, both obverse and reverse.

Rev.—AVRELIVS CAESAR AVG PII F COS. Head of Marcus Aurelius r., bare.⁶⁶

Wt. 112·2 grs. Var. of Cohen, p. 409,
13 (140–144 A.D.). [Pl. XVIII. 14.]

141. *Obv.*—Same legend. Draped and cuirassed bust of Antoninus Pius r., laureate.

Rev.—IOVI STATORI Jupiter standing facing, holding sceptre and thunderbolt.

Wt. 111·0 grs. Cohen, p. 314, 459
(140–144 A.D.). [Pl. XVIII. 15.]

142. *Obv.*—ANTONINVS AVG PIVS P P TR P COS IIII
Head of Antoninus Pius l., laureate.

Rev.—LIB IIII (in exergue). Antoninus seated l. on platform; before him stands Liberalitas pouring money into the hands of a suppliant.⁶⁷

Wt. 111·8 grs. Var. of Cohen, p. 318,
494 (145–147 A.D.). [Pl. XVIII. 16.]

143–144. *Obv.*—ANTONINVS AVG PIVS P P Draped and cuirassed bust of Antoninus Pius r., laureate.

Rev.—COS IIII Felicitas standing facing, looking l., holding capricorn and caduceus.⁶⁸

Wts. 112·7, 111·4 grs. Cohen, p. 296,
250 (145–148 A.D.).

[Pls. XVIII. 17; XIX. 1.]

⁶⁶ Cohen (*loc. cit.*) records an *aureus* in the British Museum of similar design, but having the bare head of Antoninus on the obverse. This coin constitutes a new variety.

⁶⁷ Cohen (*loc. cit.*) catalogues an *aureus* of this type in the *Cabinet de France*, having the laureate bust of Antoninus to right on the obverse. Specimens with a laureate head to right on the obverse are in the British Museum although unrecorded by Cohen. The Corbridge example supplies a new variety of obverse to this type.

⁶⁸ These two specimens are from the same obverse die, but from different reverse dies. On the reverse of No. 144 (Pl. XIX. 1) the caduceus is winged; on the other specimen it is without wings.

145. *Obv.*—ANTONINVS AVG PIVS P P TR P XI Head of Antoninus Pius r., laureate.
Rev.—COS IIII In field LIB V Liberalitas standing l., holding tessera and cornucopiae.⁶⁹
 Wt. 110.4 grs. Cohen, p. 319, 504 (148–149 A.D.). [Pl. XIX. 2.]
146. *Obv.*—ANTONINVS AVG PIVS P P TR P XII Draped bust of Antoninus Pius r., laureate.
Rev.—COS IIII . Aequitas standing l. with scales and cornucopiae.
 Wt. 109.6 grs. Cohen, p. 296, 235 (149–150 A.D.). [Pl. XIX. 3.]
147. *Obv.*—ANTONINVS AVG PIVS P P TR P XV Head of Antoninus Pius l., laureate.
Rev.—COS IIII Antoninus standing l., holding globe in r. hand and scroll in l.
 Wt. 112.0 grs. Cohen, p. 300, 305 (152–153 A.D.). [Pl. XIX. 4.]
148. *Obv.*—ANTONINVS AVG PIVS P P IMP II Head of Antoninus Pius r., laureate.
Rev.—TR POT XXI COS IIII Victory advancing l., holding wreath and palm.
 Wt. 110.6 grs. Cohen, p. 369, 1030 (158–159 A.D.). [Pl. XIX. 5.]
149. *Obv.*—ANTONINVS AVG PIVS P P TR P XXII Bust of Antoninus Pius r., laureate.
Rev.—FORTVNA OPSEQVENS In exergue COS IIII Fortuna standing l., holding in r. hand patera and rudder placed on prow of vessel, and in l. cornucopiae.
 Wt. 111.2 grs. Cohen, 1st edition, vol. vii. p. 140, 16 (159–160 A.D.). [Pl. XIX. 6.]

⁶⁹ Cohen (*loc. cit.*) mentions only a specimen in the British Museum.

FAUSTINA I.

Died 141 A.D.

150. *Obv.*—FAVSTINA AVG ANTONINI AVG P P Draped bust of Faustina I r.

Rev.—IVNONI REGINAE Throne, upon it a diadem and sceptre, to l. a peacock, to r. a basket of fruit.⁷⁰

Wt. 109.6 grs. Cohen, 1st edition, p. 432, 93; cp. vol. vii. p. 158 (138-141 A.D.). [Pl. XIX. 7.]

151. *Obv.*—DIVA AVG FAVSTINA Draped bust of Faustina I r.

Rev.—PVELLAE (in exergue) FAVSTINIANAE A building showing two storeys. In the upper one stands the Emperor holding a scroll in his l. hand and pointing with his r. hand to a plan on a table, on the other side of which are two female figures (*Matronae*?), one of whom is seated and points with a staff to the plan. In the lower storey stand two men, each carrying an infant; in the background are four female figures standing facing, and behind them three small children.⁷¹

Wt. 110.4 grs. Cohen, p. 433, 261 (141-156 A.D.). [Pl. XIX. 8.]

152. *Obv.*—DIVA . AVG FAVSTINA Draped bust of Faustina I r.

⁷⁰ There are two specimens of this type in the British Museum. One is struck from the same obverse and reverse dies, the other from the same reverse die only.

⁷¹ Cohen describes a similar specimen in the *Cabinet de France*, and gives the inscription on the obverse as DIVA AVGVSTA FAVSTINA, evidently in error, since the accompanying wood-cut gives the same legend as the Corbridge example. His description of the reverse is not correct; the standing figure on the left in the upper storey is the Emperor. He holds a scroll (volumen) in his l. hand and not a child.

Rev.—No inscription. Temple-front with six columns and door in centre, a flight of five steps leading up to it; at each corner of the pediment a caryatid, and at its apex a quadriga; figures in the pediment.

Wt. 111.0 grs. Cohen, p. 441, 316
(141-156 A.D.). [Pl. XIX. 9.]

153. *Obv.*—Similar.

Rev.—AETERNITAS Aeternitas standing l., holding globe and sceptre.⁷²

Wt. 112.7 grs. Var. of Cohen, p. 415,
35 (141-156 A.D.). [Pl. XIX. 10.]

154. *Obv.*—DIVA FAVSTINA Draped bust of Faustina I r.

Rev.—AVGVSTA Female figure (Fortune) standing l., holding patera and rudder resting on globe.

Wt. 112.0 grs. Cohen, 1st edition,
p. 427, 43 (141-156 A.D.).
[Pl. XIX. 11.]

155. *Obv.*—Similar.

Rev.—Same legend. Ceres standing l., holding torch and sceptre.

Wt. 109.5 grs. Cohen, p. 420, 95
(141-156 A.D.). [Pl. XIX. 12.]

156. *Obv.*—DIVA FAVSTINA Draped bust of Faustina I l., veiled and diademed.

Rev.—Similar to No. 155.⁷³

Wt. 109.3 grs. Cohen, p. 421, 98
(141-161 A.D.). [Pl. XIX. 13.]

⁷² Cohen (p. 415, 34) records this type in silver. *Aurei* with this obverse type have been hitherto unrecorded. Cohen (*ibid.*, 35) gives a specimen in the *Cabinet de France* with veiled bust of Faustina on the obverse, and there is one in the British Museum.

⁷³ This coin is known to Cohen only through Caylus.

MARCUS AURELIUS.

138-180 A.D.

157. *Obv.*—AVRELIVS CAESAR AVG PII F COS Head of Marcus Aurelius r., bare.

Rev.—HONOS Honos standing l., holding branch and cornucopiae⁷⁴

Wt. 112.4 grs. Cohen, p. 25, 235
(140-144 A.D.). [Pl. XIX. 14.]

158. *Obv.*—AVRELIVS CAESAR AVG PII F Draped bust of Marcus Aurelius l., bare-headed.

Rev.—TR POT III COS II Bona Fides standing facing, looking r., holding two ears of corn and basket of fruit.⁷⁵

Wt. 115.8 grs. Cohen, 1st edition,
p. 482, 217 (149 A.D.). [Pl. XIX. 15.]

159. *Obv.*—AVRELIVS CAES ANTON AVG PII F Head of Marcus Aurelius l., bare.

Rev.—TR POT X COS II Pallas standing r., poisoning javelin in r. hand and holding shield on l. arm.

Wt. 110.4 grs. Cohen, 1st edition,
p. 485, 237 ; cp. vol. vii. p. 163 (156 A.D.).
[Pl. XIX. 16.]

160. *Obv.*—AVRELIVS CAES ANTON AVG PII F Draped and cuirassed bust of Marcus Aurelius l., bare-headed.

Rev.—TR POT XI COS II Apollo standing l., holding patera and lyre.

Wt. 110.0 grs. Cohen, p. 70, 705
(157 A.D.). [Pl. XIX. 17.]

⁷⁴ Cohen (*loc. cit.*) mentions only a specimen in the British Museum.

⁷⁵ A specimen in the British Museum is struck from the same obverse die.

(ii.) CORBRIDGE FOURTH-CENTURY HOARD.

VALENTINIAN I.

364-375 A.D.

1. *Obv.*—D. N. VALENTINIANVS P F AVG Draped and cuirassed bust of Valentinian I r., diademed.

Rev.—RESTITVTOR REIPVBLICAE Valentinian standing facing, holding labarum and a Victory on a globe. Mint-mark RT.

Wt. 69.0 grs. Cohen, p. 90, 28. Rome mint. 364-375 A.D.

2. *Obv.*—Similar.

Rev.—Similar. Mint-mark Rσ.

Wt. 69.4 grs. Cohen, p. 90, 28. Rome mint. 364-375 A.D.

- 3-4. *Obv.*—Similar.

Rev.—VICTORIA AVGG Two emperors seated facing, holding a globe; between them a palm-branch; behind them a Victory facing. Mint-mark TROBC

Wts. 68.8 (2) grs. Cohen, p. 93, 43. Trier mint. 364-375 A.D.

VALENS.

364-378 A.D.

5. *Obv.*—D N VALENS P F AVG Draped and cuirassed bust of Valens r., diademed.

Rev.—Similar to No. 3. Mint-mark TROBC

Wt. 68.8 grs. Cohen, p. 111, 53. Trier mint. 364-375 A.D.

6. *Obv.*—Similar.

Rev.—Similar to No. 3. Mint-mark TROBT

• Wt. 68·4 grs. Cohen, p. 111, 53. Trier mint. 364–375 A.D.

GRATIAN.

367–383 A.D.

7. *Obv.*—D N GRATIANVS P F AVG Draped and cuirassed bust of Gratian r., diademed.

Rev.—PRINCIPIVM IVVENTVTIS Gratian with nimbus standing r., holding spear and globe. Mint-mark *CONSQ.

Wt. 82·2 grs. Cohen, p. 130, 28. Constantinople mint. 367–375 A.D.

8. *Obv.*—Similar.

Rev.—Similar to No. 3. Mint-mark COM.

Wt. 69·4 grs. Cohen, p. 131, 38. Uncertain mint.⁷⁶ 367–383 A.D.

9–11. *Obv.*—Similar.

Rev.—Similar. Mint-mark TROBC.

Wts. 69·0, 68·4, 68·3 grs. Cohen, p. 131, 38. Trier mint. 367–383 A.D.

12–14. *Obv.*—Similar.

Rev. Similar. Mint-mark TROBS.

Wts. 69·4, 69·2, 68·4 grs. Cohen, p. 131, 38. Trier mint. 367–383 A.D.

15–21. *Obv.*—Similar.

Rev.—Similar. Mint-mark TROBT.

Wts. 69·8, 69·6 (2), 69·4 (3), 68·7 grs. Cohen, p. 131, 38. Trier mint. 367–383 A.D.

⁷⁶ The mark COM, an abbreviation for Comes Sacrarum Largitionum, is the stamp of the chief financial minister, and does not, when unaccompanied by other marks, assist in locating the mint.

22. *Obv.*—D N GRATIANVS P F AVG Draped and cuirassed bust of Gratian r., diademed.

Rev.—Similar. Mint-mark TROZ.⁷⁷

Wt. 67·3 grs. Cohen, p. 131, 38. Trier mint. 367–383 A.D.

VALENTINIAN II.

375–392 A.D.

23. *Obv.*—D N VALENTINIANVS IVN P F AVG Draped and cuirassed bust of Valentinian II r., diademed.

Rev.—Similar. Mint-mark TROBC.

Wt. 68·6 grs. Cohen, p. 143, 36. Trier mint. 375–383 A.D.

- 24–30. *Obv.*—Similar.

Rev.—Similar. Mint-mark TROBT.

Wts. 70·0, 69·6, 69·4, 69·0 (2), 68·7, 68·6 grs. Cohen, p. 143, 36. Trier mint. 375–383 A.D.

THEODOSIUS.

379–395 A.D.

31. *Obv.*—D N THEODOSIVS P F AVG Draped and cuirassed bust of Theodosius r., diademed.

Rev.—Similar. Mint-mark COM.

Wt. 70·0 grs. Cohen, p. 159, 37. Uncertain mint. 375–383 A.D.

- 32–35. *Obv.*—Similar.

Rev.—Similar. Mint-mark TROBC.

Wts. 69·6, 69·4, 68·4, 68·2 grs. Cohen, p. 159, 37. Trier mint. 375–383 A.D.

⁷⁷ A contemporary forgery. The V of GRATIANVS is omitted on the obverse. The mint-mark TROZ is intended for TROBS.

MAGNUS MAXIMUS.

383-388 A.D.

36. *Obv.*—D N MAG MAXIMVS P F AVG Draped and cuirassed bust of Maximus r., diademed.

Rev.—Similar. Mint-mark TROB.

Wt. 68.0 grs. Cohen, p. 168, 9. Trier mint. 383-388 A.D.

37-48. *Obv.*—Similar.

Rev.—Similar to No. 1. Mint-mark $\frac{*|}{SMTR}$

Wts. 70.4, 69.6, 69.5, 69.2 (2), 69.0, 68.8 (2), 68.6, 68.5, 68.0, 67.7 grs. Cohen, p. 167, 4. Trier mint. 383-388 A.D.

H. H. E. CRASTER.

XIV.

THE COINAGE OF THE MALDIVE ISLANDS WITH SOME NOTES ON THE COWRIE AND LARIN.

(See Plate XX.)

THE Maldive Islands are a dependency of Ceylon, lying some 400 miles to the west of it. They have been but little visited by Europeans, and until recently their coins were rarely to be found in European collections. The coins that have been previously published are few in number; M. F. Soret published a coin of Muin al-Din of the year 1212 A.H. in the *Revue Belge de Numismatique*, 1856, p. 174, but he misread the name as Muiz al-Din; five coins of three Sultans are given by Weil in the Oriental volume of the Fonrobert Catalogue, Nos. 3871-3875, and there are six coins of five Sultans in the fourth edition of the Catalogue of the Batavian Society's Collection (1896), p. 180. A large and a small coin of Imad-al-Din (1835-1882 A.D.) have been published by Mr. Bell in his *Report*, pp. 118 and 121, and the same two coins are figured in the *Voyage of F. Pyrrard*, p. 233, where also is an illustration of a larin obtained in the Maldives.

The British Museum had very few coins of this series till 1893, when a fairly representative collection was presented to it by Mr. P. E. Radley. Through the kindness of the Rev. W. G. Searle, I have been enabled to examine a large number of coins in the Fitzwilliam

Museum, Cambridge, and Mr. D. F. Howorth has also allowed me to examine his collection. In addition, Mr. H. W. Codrington of the Ceylon Civil Service has sent me a list of coins in the Colombo Museum and in his possession. These collections have provided me with sufficient material for this paper, which it is hoped may have the effect of bringing to light further specimens of the coinage of these islands.

Our knowledge of the history of the Maldives is derived almost entirely from the accounts of the few travellers who have visited them, of whom the most important are Ibn Batuta (1344-1346) and François Pyrard de Laval (1602-1607), and from the Government records in Ceylon for recent years. All information available till 1881 was collected by Mr. H. C. P. Bell, of the Ceylon Civil Service, in his *Report on the Maldivé Islands* presented to the Ceylon Government in 1881 (published in 1883). For the purposes of this paper it will be sufficient to state that the inhabitants of the Maldives in the twelfth century became converts to Islam, which has strongly influenced their civilization. Arabic is the language of the coin-legends and not Maldivé. Since the middle of the seventeenth century the Maldives have been voluntarily under the suzerainty of Ceylon, to which an embassy is annually despatched bearing tribute. The Sultans are nevertheless still practically independent.

Before proceeding to deal with the actual coinage of the Maldives, which does not begin till the end of the seventeenth century, some notice must be taken of the earlier currency of the islands, the cowrie and the larin, on account of their importance in the commerce of the Indian Ocean.

The Maldives have been famous from the earliest times for their wealth in cowries, and they appear to have been the sole source of supply of this currency to India and Africa. The Arab geographers, Sulaiman¹ and Masudi² in the tenth and Idrisi³ in the eleventh centuries, all note the use of cowries as currency in these islands. Masudi and Idrisi give us an account of how they were obtained. Branches were thrown into the sea to which the molluscs attached themselves; they were then hauled out and dried in the sun, and when clean taken to fill the royal treasury.

Ibn Batuta,⁴ the famous Moorish traveller, who spent about a year and a half in the Maldives between 1344 and 1346, gives a similar account of the use of cowries, and adds that 400,000 were worth a dinar of gold. They were exported to Bengal and also to Africa, where he had himself seen them in use at Mali and Juju in the Sudan, where they were worth 1150 to the dinar of gold.

Barbosa,⁵ an observant Portuguese soldier, who was in the East early in the sixteenth century, notes that there was traffic in cowries between the Maldives and Cambay and Bengal, where they were preferred to copper for small transactions.

François Pyrard de Laval, a French sailor, who was wrecked on the Maldives in 1602 and kept a prisoner

¹ Reinaud, *Relation des Voyages faits par les Arabes*, 1845, p. 5.

² Meynard et de Courteille, *Les Prairies d'Or*, 1863-71, t. i. pp. 337, 338.

³ Trad. par Jaubert, 1836, t. i. p. 39.

⁴ Texte et Trad. par Defremery et Sanguinetti, 1858, t. iv. p. 121.

⁵ *Voyage of F. Pyrard de Laval*, edited for the Hakluyt Society by A. Gray and H. O. P. Bell, vol. ii. p. 477.

there till 1607, has left a very full account of the Maldives of his time. His journal has been edited for the Hakluyt Society with valuable notes by Messrs. A. Gray and H. C. P. Bell, of the Ceylon Civil Service. His account of the currencies of the time is detailed and important for this paper.

“The coin of the realm is silver only and of one sort. These are pieces of silver of the value of about eight sous of our money as long as the finger and doubled down. The king has them struck in his island and stamped with his name in Arabic characters. Though foreign coins are current, they are only taken at their just weight and value, and must be silver or gold; all others are rejected. The king coins *larins* only and no pieces of less value: for the use of trade they cut the silver and pay by weight for the value of the goods bought. They take no silver without weighing and proving it, and every one has weights for this purpose. Then in place of copper and small change they use the shells of which I shall presently speak. 12,000 are worth a *larin*. There is another kind of wealth in the Maldives, viz. certain little shells containing a little animal, large as the tip of the little finger and quite white, polished and bright. They call them ‘*boly*,’ and export to all parts an infinite quantity in such wise that I have seen thirty or forty whole ships loaded with them without other cargo. All go to Bengal, for there is a demand for them at high prices. The people of Bengal use them as ordinary money although they have gold and silver and other metals; all the merchants from other places in India take a large quantity to carry to Bengal where they are always in demand; for they are produced nowhere but at the Maldives on which account they

serve as petty cash. These cowries are put up in bags of 12,000 and are taken as counted.”⁶

The use of the cowrie (*cypraea moneta*) as currency is well known. We cannot go fully into the question of its use here, but it may be as well to point out that its use was by no means limited to savage or primitive peoples. It was used in India, more particularly in Bengal, as small change for centuries, and it would appear that the sole source of supply was the Maldive Islands. Deposits of cowries have been found in excavations in ancient buildings in India.⁷ Fa Hien notes that in buying and selling, cowries were used in India about 400 A.D.⁸

We will confine ourselves to its use in Bengal in the sixteenth and seventeenth centuries, and illustrate its importance from contemporary records.

Tavernier, discussing the coins of India, says: “Their other small Money are the little Shells which they call Cori; the sides whereof turn circularly inward. Nor are they to be found in any part of the World but the Maldives Islands. They are the greatest part of the revenue of the King of that Island. For they are transported into all the territories of the Great Mogull: into the Kingdoms of Visapour and Golconda: and into the islands of America to serve instead of money. Near the Sea they give 80 for a Pecha, but the further you go from the Sea the less you have; so that at Agra they will not give you above 50 or 55 for a Pecha.”⁹ Among Tavernier’s other references to the use of the cowrie in

⁶ Abbreviated from *Voyage of F. Pyrard de Laval*, vol. i. pp. 232-240.

⁷ Cunningham, *Archaeological Survey of India*, x. 78; xiv. 17; xvi. 104, &c.

⁸ *Records of Buddhistic Kingdoms*, transl. by Legge, 1886, p. 48.

⁹ *Travels in India*, p. 22, English edition, by J. P. London, 1684.

India may be noted his statement that all along the Coromandel coast, from Cape Comorin as far as Bengal, they have little other money than the fanam, the pecha of copper, and the shells which pass for small money.

J. Albert de Mandelslo, who was in Gujarat about 1633, writes: "They also make use of Almonds whereof thirty-six make a Peyse as also of certain shells which they call Kaurets and are gathered on the seaside, eighty whereof amount to a Peyse."¹⁰

Bowrey's account of the countries round the Bay of Bengal contains a good deal of information about the currency of the period (c. 1669-1679). On the cowrie he says: "The Nabob and Some Merchants here (*i.e.* Hugly) and in Ballasore and Piplo have about 20 Saile of Ships of considerable burden that annually trade to sea, some to Ceylone, some to Tanassaree. Those fetch elephants and the rest, 6 or 7 yearly, go to the twelve thousand Islands called Maldiva to fetch cowries and Cayre and most commonly doe make very profitable voyages."¹¹

"Cowries (all the moneys known to the ignorant Ourias) are small shells brought from the Islands of Malldiva A greate quantitie passe for one Rupee, not less than 3200."¹²

"Their small moneys are cowries, being small shells taken out of the sea, passing very current by tale.

1 gunda is 4 cowries.

5 gundas is 1 burrie or 20 cowries.

4 burries is 1 pone or 80 cowries.

¹⁰ *Voyages into the East Indies*, transl. by J. Davies, 1662, p. 85.

¹¹ *Account of Countries round the Bay of Bengal*, Hakl. Soc., 1905, p. 179.

¹² *Ibid.*, p. 200.

16 pone make 1 cawne or 1280 cowries.

2 cawne and $\frac{1}{2}$ is 1 rupee or 3200 cowries.¹³

They seldom rise or fall more than two Pone in one Rupee and that only in Ballasore at the arrival of the Ships from Insulae Maldivae.”¹⁴

W. Hedges in his *Diary* (1683-1688) refers frequently to ships going from Bengal to the Maldives for cowries. When he visited these islands he saw “the Houses which were Magazines for ye cowries that were taken for the King.”¹⁵

These quotations will suffice to show that the source of the cowrie for currency in India was the Maldives and had been from early times. Their use was not limited to Bengal, but spread into Assam and Sylhet, where enormous quantities were in circulation until quite recently.¹⁶

The larin was one of the standard currencies of the Indian Ocean about the end of the sixteenth century. It appears to have been first struck probably about the beginning of the sixteenth century at Lar in the Persian Gulf, from which it takes its name. It became an exceedingly popular coin on account of the purity of its silver, and its use spread from the Persian Gulf down the west coast of India to Ceylon. It was thus described by William Barret, an English merchant, in his account of the money and measures of Balsara (al-Basra) in 1584. “The sayd larine is a strange piece

¹³ Gunda = Ganda or rati berry; burry = bauri; Pone = pan; Cawne = kāhan. Cf. Alex. Hamilton, *Account of East Indies*, Edin., 1827. Table of weights, p. 7, vol. ii., Oriya and Bengal, “80 cowries to a Poon; 32-36 Poon to a Rupee current.”

¹⁴ *Ibid.*, p. 218.

¹⁵ *Diary*, Hakl. Soc., 1887, p. 11.

¹⁶ Cf. Gait, *History of Assam*, p. 272.

of money, not being round like all other current money in Christianitie, but is a small rod of silver of the greatnesse of the pen of a goose feather wherewith we use to write and in length about one eighth part thereof, which is so wrested that the two ends meet at the juste halfe part and in the head thereof there is a stamp Turkesco and these be the best current money in all the Indies and six of the larines make a ducat." ¹⁷

In view of the importance of the larin in the commerce of Western Indian and the Persian Gulf in the sixteenth and seventeenth centuries, it may be of interest to give a few further quotations from contemporary travels as to its use there. Pedro Texeira in his account of Basora (al-Basra) at end of the seventeenth century, says: "The silver coins are first the larins, long money with both ends bent, worth sixty-five maravedis a-piece and secondly round coins called xays of the shape and value of our real sexillo. This is of a lower standard than the other which is very fine." ¹⁸ Of Lar, he writes: "There is also the city of Lar or Lara, as we Portuguese pronounce it, whence are called laris, a money of the finest silver, very well drawn and current throughout the east." ¹⁹ Captain Jourdain in his *Journal* (c. 1610-1619) tells us in his account of Dabul in Bijapur that "the factour of the Portugualls there pays the Governor of Dabul two thousand larins per year for the monopoly of selling wine." ²⁰

Van Linshoten, describing the money of Goa, says:

¹⁷ Hakluyt, *Principal Voyages*, vol. vi. p. 12. (Hakl. Soc., Extra Ser., 1904.)

¹⁸ *Travels*, Hakl. Soc., 1902, p. 30.

¹⁹ *Ibid.*, p. 241.

²⁰ *Journal*, Hakl. Soc., 1905, p. 198.

"There is also a kind of money out of Persia called Lariins which are long, very good, and fine silver without any alloy."²¹

Sir Thomas Herbert was at Lar in 1627, and thus describes the larin: "Near this Byzar the Larnes are coyned, a famous sort of money being pure silver but shaped like a date stone, the King's name or some sentence out of the Alcoran being stamped upon it; in our money it values ten pence."²²

Tavernier, in discussing the coinage of Persia, gives a full account of the larin. "This²³ Money is called Larin and signifies the same with our Crowns: The five pieces are as much in value as one of our Crowns and the Ten Half-Larins as much. Only the Five Larins want in weight Eight Sous of our Crown. This is that which the Emirs or Princes of Arabia take for the Coining of their Money; and the profit which they make by the Merchants that travel through the Desart either into Persia or the Indies. For then the Emirs come to the caravans to take their Tolls and to change their Crowns, Reals or Ducats of Gold for these Larins. . . . If these five Larins did but weigh as much as a Crown or Real of Spain, the merchants would never be much troubled. But when they come to Persia or the Indies, they must carry their money to the Mint, as I have said in another place, and lose about eight Sous in a Crown which amounts to 14 per cent. As for what remains, the Larins are one of the ancient Coins of Persia and though at this day they are only current in Arabia and at Balsara nevertheless from Braghatt to the island of

²¹ *Voyage to the East Indies*, Hakl. Soc., 1885, i. p. 242.

²² *Some Years' Travels*, London, 1665, p. 130.

²³ Referring to his illustration.

Ceylan, they traffick altogether with the Larin and all along the Persian Gulf, where they take eighty larins for one Toman which is fifty Abbasis.”²⁴

Chardin thus describes the larin about 1675. “Il y a une monnoye tout le long du Golphe Persique, nommée Larins, qui est celle dont on s’y sert le plus dans le Commerce. Larin veut dire monnoye de Lar qui est le nom de la Ville capitale de la Caramanie deserte, laquelle etait un Royaume particulier, avant Abas le Grand, Roi de Perse, qui la conquit & l’incorpora à son Royaume, il y a quelque six-vingt ans. Cette monnoye est d’argent fin & vaut deux Chayés & demi qui font onze sols trois deniers de notre monnoye. Elle est d’une figure tout extraordinaire : car c’est un fil rond, gros comme une plume à écrire, plié en deux de la longueur d’un travers de pouce, avec une petite marque dessus qui est le coin du Prince. Comme on n’en bat plus depuis la conquête du Royaume on n’en voit plus gueres : mais on ne laisse pas de compter par cette monnoye en tout ce País-là & aux Indes, le long du Golphe de Cambaye & dans les País qui en sont proche. On dit qu’elle avait cours autrefois, dans tout l’Orient.”²⁵

Such quotations might be multiplied considerably, but these are sufficient to show the high esteem in which the larin was held on account of the purity of its silver. Most authorities give its exchange value as about tenpence in English money. The approximate weight is 74 grains.

Pyrard’s statement that the King of the Maldives struck larins in his own name is interesting. There

²⁴ *Moneys of Persia*, p. 1 (Figs. 1 and 2), London, 1684.

²⁵ *Voyages*, Amsterdam, 1735, iii, p. 128.

seems no reason to doubt the accuracy of this statement, or that the larins in circulation in the Maldives were not all imported from the mainland. In India larins were struck by various Rajas, notably by the Adil Shahi dynasty of Bijapur.²⁶

Though it is impossible to attempt a complete classification of the larins from their fragmentary inscriptions, it is evident that several quite different legends occur.

Professor H. H. Wilson discussed one series in *Num. Chron.*, 1854, p. 180. For the obverse, if the term may be used, he suggested the reading, السلطان على عادل شاه, which is most probably correct, though, as Dr. Codrington has pointed out, the king's name is usually written عاد الشاه. The reverse he read ضرب لاری دانکه سکه, which is as satisfactory a reading as has been proposed; the first two words are certainly correct. The legends on the larins of Persia and Bijapur have been fully discussed by Dr. Codrington in the *J.B.B.R.A.S.*, vol. xviii. pp. 36, 37, and an interesting account of their circulation is given by Dr. Gerson da Cuiña in his *Contributions to Indo-Portuguese Numismatics*, pp. 40-45. Finds of larins have been frequently made in the Bombay Presidency.

In Ceylon the larin was doubled up like a hook, and was familiar to seventeenth-century travellers as "fish-hook money." According to Knox, "There is another sort (of money) which all people by the king's permission make and do make. The shape is like a fish hook, they stamp what mark or impression on it they please. The silver is purely fine beyond pieces of eight."²⁷

A fourth variety of the larin comes from the Arabian

²⁶ Codrington, *Musulman Numismatics*, p. 118.

²⁷ R. Knox, *Historical Relation of Ceylon* (Glasgow, 1911), p. 156.

side of the Persian Gulf, where it still circulates. It is of about half the usual length, of base metal, almost wholly copper, and is called *tawil* (*i.e.* طويل, "long"). The traces of inscriptions on the specimens I have seen are quite undecipherable. W. G. Palgrave's²⁸ account of this coinage may be quoted: "But in Hasa we find an entirely original and a perfectly local coinage, namely, the 'Toweelah,' or 'long bit,' as it is very suitably called, from its form. It consists of a small copper bar, much like a stout tack, about an inch in length, and split at one end, with the fissure slightly opened; so that it looks altogether like a compressed Y. Along one of its flattened sides run a few Cufic characters, indicating the name of the Carmathian prince under whose auspices this choice production of Arab numismatics was achieved; nothing else is to be read on the Toweelah, neither date nor motto. Three of these are worth a 'gorsh,' and accordingly every copper nail separately may equal about three farthings. This currency is available in Hasa, its native place, alone; and hence the proverb, 'Zey Toweelat-il-Hasa,' 'like a Hasa long bit,' is often applied to a person who can only make himself valuable at home. Silver and gold Toweelahs were issued in the days of Carmathian glory; but they have been long since melted down."

It is evident from Pyrard's account that at the beginning of the seventeenth century the currency of the Maldives consisted of larins and cowries only, and the Sultans had not yet begun to issue a coinage in the stricter sense of the word. The first Sultan to issue coins appears to have been Muhammad (1691-1700 A.D.),

²⁸ *Journey through Central and Eastern Arabia* (London, 1865), ii. 179.

to whom may be attributed the first of the two silver coins in the Fitzwilliam Museum (Pl. XX. 1). The legends on this coin appear to have been adopted from the well-known formula, ضارب النضر صاحب العز والنصر, فى البر والبحر, though there does not seem to be room for some such word as صاحب on the reverse; this formula is common on Othmanli coins of the sixteenth and seventeenth centuries, which must have been known in the Maldives as they were widely employed in the trade of the Indian Ocean and have been found as far south as Ceylon. The pretentious title of "Sultan of Land and Sea" is not an unfitting one for the "Sultan of 12,000 Islands," and might be of independent origin, but the fact that we have another portion of the Othmanli formula on the reverse points to its having been adopted from Turkish coins.

The legends on the second piece are very incomplete, but the date is clear enough to justify the attribution to Muhammad Imad al-Din (1704-1721 A.D.). The weights of these two coins, 74·3 and 73·4 grains respectively, show that they were struck on the standard of the larin. They were probably known as laris, as the survival of the name for the copper coins shows. It is probable that few of these silver coins were issued, as early in the eighteenth century the Indian rupee was introduced which displaced the larin and has since remained the standard coin of the Maldives.²⁹

No silver coins are known till the present century, and probably none were struck. We have, however, a regular coinage in copper from the reign of Ibrahim

²⁹ Cf. *Transactions of the Bombay Geographical Society*, vol. i. p. 88; *Memoir of the Maldives*, by Messrs. Young and Christopher.

Iskandar (1720-1749) onwards. There are three denominations of these coins, the largest weighing about 146 grains and the others a half and quarter that weight. These coins are known as the "large," "half," and "small" lari respectively (Mr. H. W. Codrington). Some of the later Sultans appear to have issued a still smaller denomination, one-eighth of a lari. The metal of the earlier coins is copper with a large admixture of tin, while the later pieces, with the exception of a few small brass coins, are practically pure copper. The earliest copper coin described in this paper bears the date 1146 A.H., and we have a regular series from that date onwards.³⁰

As is usual in Arab series, there is little variety in the types of these coins. The obverse bears the Sultan's name, which usually includes the name Iskandar (اسكندر), and the reverse the Hijra date with the title سلطان البر والبحر, which we have already found on the earliest silver coin. An exception to this type is formed by the small coins of Muiz al-Din, the reverse legends of which give the name of his father ابن السلطان حسن عز الدين. The execution of these pieces is quite up to the average of Muhammadan copper coins.

The finest product of the Maldivé mint, however, is the gold muhur of Hasan Nur al-Din (Pl. XX. 13), which will bear comparison with the best products of the Mughal die-engravers. I owe my knowledge of this piece to Dr. Codrington, who kindly gave me a description of it from a rubbing in his possession from a specimen in Ceylon. Since then Mr. H. Chapman has sent me

³⁰ Mr. Bell mentions a coin of 1129 A.H. in his *Report*, p. 121, note 2, but gives no particulars.

a cast of a specimen in the Fitzwilliam Museum, so that I am able to illustrate it. Among the remarkable features of the legends of this coin are the phrase نبوى هجرى, which has not before been noted on a coin, though usual in manuscripts, and the final words of the legend من قام which, as Professor E. von Zambaur has suggested to me, is probably a pious exclamation, meaning, "who shall rise from the dead."

The reigning Sultan has recently issued a silver piece of 4 lariat [Pl. XX. 23], evidently of European mintage, for my knowledge of which I am indebted to Mr. W. H. Valentine. The obverse gives the full title of the Sultan, while the reverse drops the familiar سلطان البر والبحر replacing it by the denomination (مالى محليديب) لا ريات, the mint "Male in the Maldives" and the date.

MUHAMMAD. 1691-1700 A.D.

Obverse.	Reverse.
سلطان	العز والنصر
البر والبحر	ضرب فى
السلطان محمد	١١٠٨
	سنة هجرى

℞. 0.6. Wt. 74.3. [Pl. XX. 1.]

MUHAMMAD IMAD AL-DIN. 1704-1721 A.D.

السلطان	سلطان
محمد	١١١٦
...	سنة
..	(البر والبحر)

℞. 0.6. Wt. 73.4. [Pl. XX. 2.]

IBRAHIM ISKANDAR. 1720-1749 A.D.

- | | Obverse. | Reverse. |
|---------------------------|---------------------------------------|-------------------------------------|
| 1. | السلطان
ابراهيم اسكندر
ضرب محمد | سلطان
البر والبحر
١١٤٦
سنة |
| | Æ. 0·8. Wt. 146·3. [Pl. XX. 3.] | |
| 2. Similar. ³¹ | | ١١٥٦
سنة |
| | Æ. 0·75. Wt. 148·4. | |
| 3. Similar. | | ١١٦٠
سنة |
| | Æ. 0·85. Wt. 145·4. | |
| 4. Similar. | | ١١٥٣
سنة |
| | Æ. 0·6. Wt. 73 (half-lari). | |

AL-MUKARRAM MUHAMMAD IMAD AL-DIN. 1749-1754 A.D.

- | | | |
|-------------|--------------------------------------|--|
| 1. | السلطان المكرم
محمد عماد
الدين | سلطان البر
١١٦٤
سنة
والبحر ضرب هجرى ³² |
| | Æ. 0·75. Wt. 148·2. [Pl. XX. 4.] | |
| 2. Similar. | | سلطان البر
١١٦٨
سنة
والبحر ضرب |
| | Æ. 0·75. Wt. 148·5. [Pl. XX. 5.] | |

³¹ The first two coins are in the Fitzwilliam Museum, the second belongs to Mr. D. F. Howorth, while the fourth is in the Colombo Museum. The legends have been completed from a specimen of the year 1146 in the British Museum.

³² The final word of the reverse legend is not certain on any specimen, but it is most probably هجرى. It does not appear on the later coins.

AL-GHAZI HASAN IZZ AL-DIN. 1760-1766 A.D.

- | | |
|--------------------------------------|--|
| Obverse. | Reverse. |
| 1. السلطان
الغازي حسن
عز الدين | سلطان
١١٧٣
في سنة
البر والبحر
Æ. 0·85. Wt. 146·4. |
| 2. Similar (order varied). | Similar. ³³
١١٧٧
(في) سنة
Æ. 0·75. Wt. 141·3. [Pl. XX. 6.] |

AL-GHAZI MUHAMMAD GHIYAS AL-DIN. 1766-1773 A.D.

- | | |
|---|--|
| 1. السلطان محمد
غياث الدين
اسكندر | سلطان
١١٨٢
سنة
البر والبحر ³⁴
Æ. 0·8. Wt. 150. [Pl. XX. 7.] |
| 2. | Similar, but reverse begins السلطان
and ١١٨٤
سنة
Æ. 0·5. Wt. 22. [Pl. XX. 8.] |
| 3. السلطان
الغازي محمد
اسكندر | سلطان
١١٨٦
سنة
البر والبحر
Æ. 0·5. Wt. 32. [Pl. XX. 9.] |

³³ The specimen illustrated is from Mr. D. F. Howorth's collection, but the British Museum has specimens of both dates.

³⁴ The large piece is in the Fitzwilliam and the others are in the British Museum. The last piece must be of Ghiyas al-Din, though the change of title is remarkable.

MUHAMMAD MUIZ AL-DIN. 1773-1778 A.D.

Obverse.	Reverse.
1. محمد السلطان معز الدين اسكندر	سلطان البر ١١٨٩ سنة البحر
Æ. 0.75. Wt. 143.8. [Pl. XX. 10.]	

2-3. السلطان محمد اسكندر معز الدين ³³	ابن السلطان حسن عز الدين ١١٨٨ سنة
Æ. [Pl. XX. 11, 12.]	

HASAN NUR AL-DIN. 1778-1798 A.D.

1. من قام شاه حسن نور الدين اسكندر ابن المرحوم	شاه غازي حسن ١٢٠٧ عز الدين سنة ضرب هجري نبوي
A7. 1.2. Wt. 192.3 (ringed). [Pl. XX. 13.]	

2. السلطان حسن نور الدين	سلطان المر والبحر ١١٩٧ سنة
Æ. 0.8. Wt. 148.3.	
3. Similar.	١٢٠٠ سنة
Æ. 0.8. Wt. 148.7.	

³³ The above legend is completely given in the two specimens illustrated, one of which (No. 2) belongs to Mr. Howorth and the other to the Fitzwilliam Museum. The British Museum has also specimens.

Obverse.
4. Similar.

Reverse.

۱۲۰۷
سنة

Æ. 0.8. Wt. 151.7. [Pl. XX. 14.]

5-8. Similar: years, ۱۱۹۴ (Æ. 0.4. Wt. 33. [Pl. XX. 15]); ۱۱۹۷ (Æ. 0.45. Wt. 23.5); ۱۲۰۰ (Æ. 0.24. Wt. 22.6); ۱۲۰۲ (Æ. 0.45. Wt. 31.2).

MUIN AL-DIN ISKANDAR. 1798-1834 A.D.

1. السلطان
محمد
معين
الدين اسكندر

سلطان
البر والبحر
۱۲۱۴
سنة

Æ. 0.8. Wt. 149.3. [Pl. XX. 16.] (Fitzwilliam.)

2-7. Similar: years, ۱۲۱۶ (Æ. 0.45. Wt. 37.5); ۱۲۱۹ (Æ. 0.4. Wt. 25.5. [Pl. XX. 17]); ۱۲۲۱ (Æ. 0.4. Wt. 32.6); ۱۲۳۸ (Æ. 0.4. Wt. 21.9); ۱۲۳۹ (Æ. 0.4. Wt. 28.3); ۱۲۴۸ (Æ. 0.45. Wt. 36.2).

MUHAMMAD IMAD AL-DIN. 1834-1882 A.D.

1. السلطان
محمد عماد
الدين
اسكندر

سلطان
البر والبحر
۱۲۹۴
سنة

سلهه³⁶ (?)
Æ. 0.75. Wt. 120. [Pl. XX. 18.]

2. Similar.

Æ. 0.35. Wt. 29.

3. Similar.

سلطان
البر
۱۲۹۸
سنة
والبحر

Æ. 0.75. Wt. 138.3. [Pl. XX. 19.]

³⁶ I am unable to explain the last word on the reverse of Pl. XX. 18. It occurs only on coins of this year.

- 4-8. Similar. Years: ۱۲۵۷ (0.4. Wt. 22.5); ۱۲۷۶ (0.55. Wt. 38.3. [Pl. XX. 20]); ۱۲۷۶ (0.35. Wt. 73.3); ۱۲۹۲ (0.4. Wt. 22.6); ۱۲۹۸ (0.4. Wt. 29.7. [Pl. XX. 21]).

IBRAHIM NUR AL-DIN. 1882-1900 A.D.

Obverse.	Reverse.
السلطان	سلطان
ابرهیم	البر
نور الدین	۱۳۰۰
اسکندر	سنة
	والبحر

Æ. 0.4. Wt. 15. [Pl. XX. 22.]

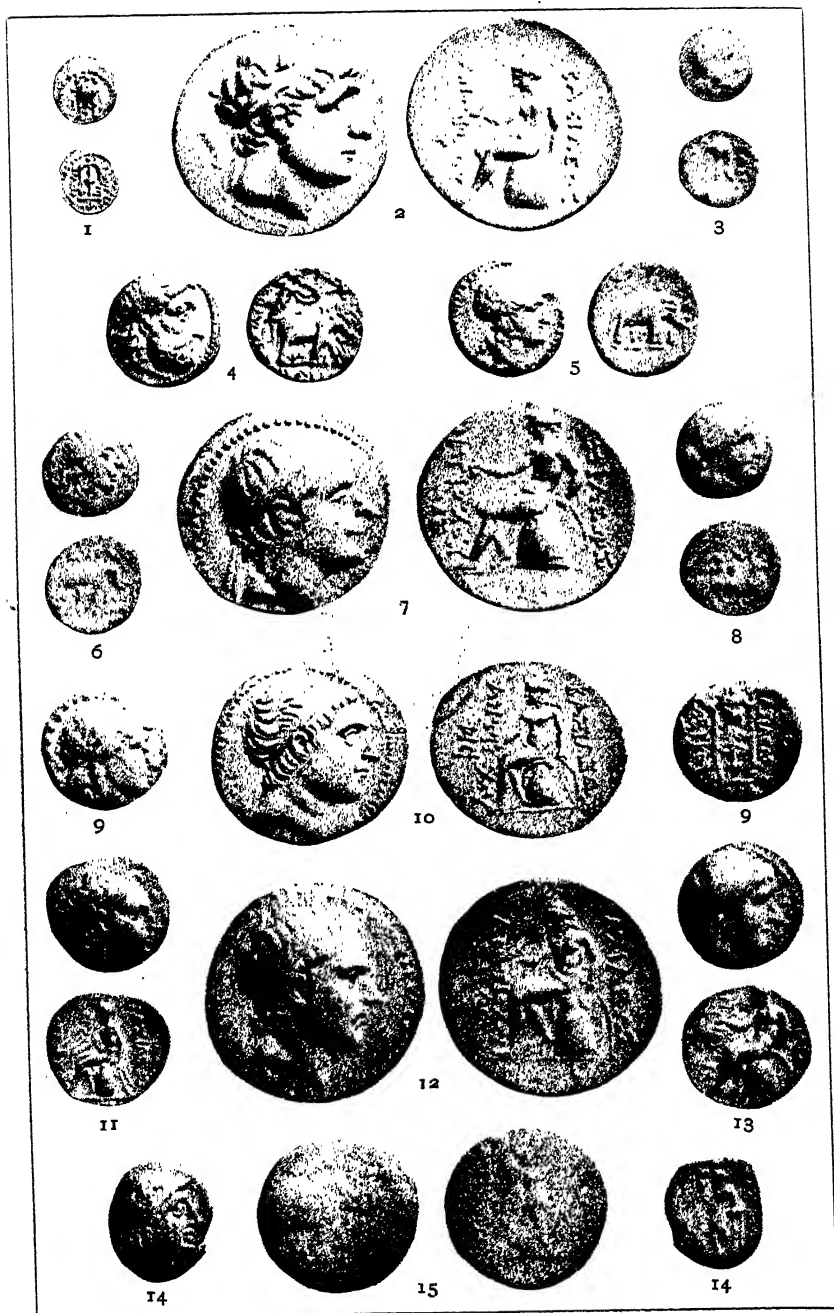
MUHAMMAD IMAD AL-DIN. 1900-1904 A.D.

- | | | |
|----|--|--|
| 1. | الحاج
السلطان
محمد
عماد الدين
اسکندر | ع
لاریات
ضرب فی مالے
مجلدیب
۱۳۲۰ |
| | | Æ. 0.6. Wt. 38.4. [Pl. XX. 23.] |
| 2. | محمد
السلطان
عماد الدين
اسکندر | سلطان
۱۳۱۸
سنة
البر والبحر |
| | | Æ. 0.45. [Pl. XX. 24.] |

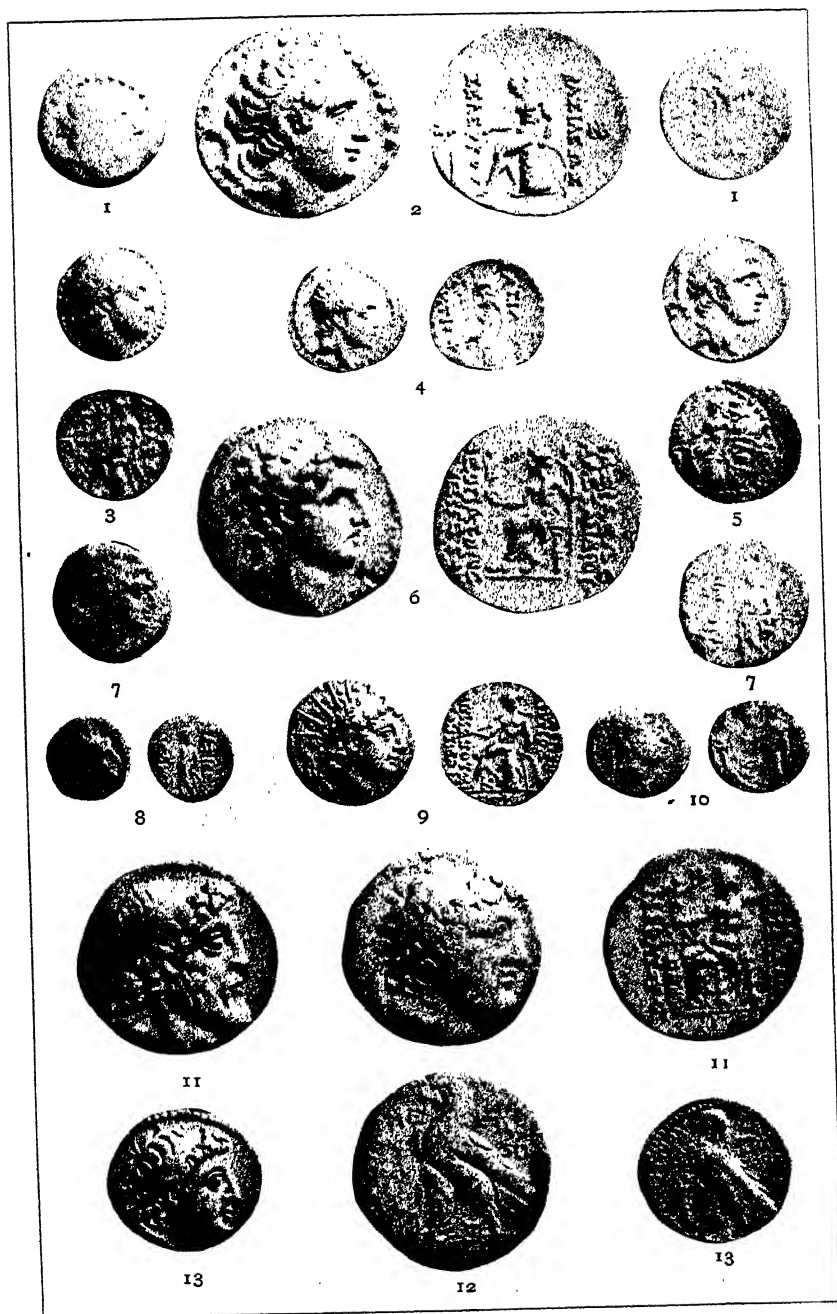
MUHAMMAD SHAMS AL-DIN ISKANDAR. 1904- A.D.

Mr. H. W. Codrington informs me that coins have been struck in England for this king, but I have been unable to procure specimens.

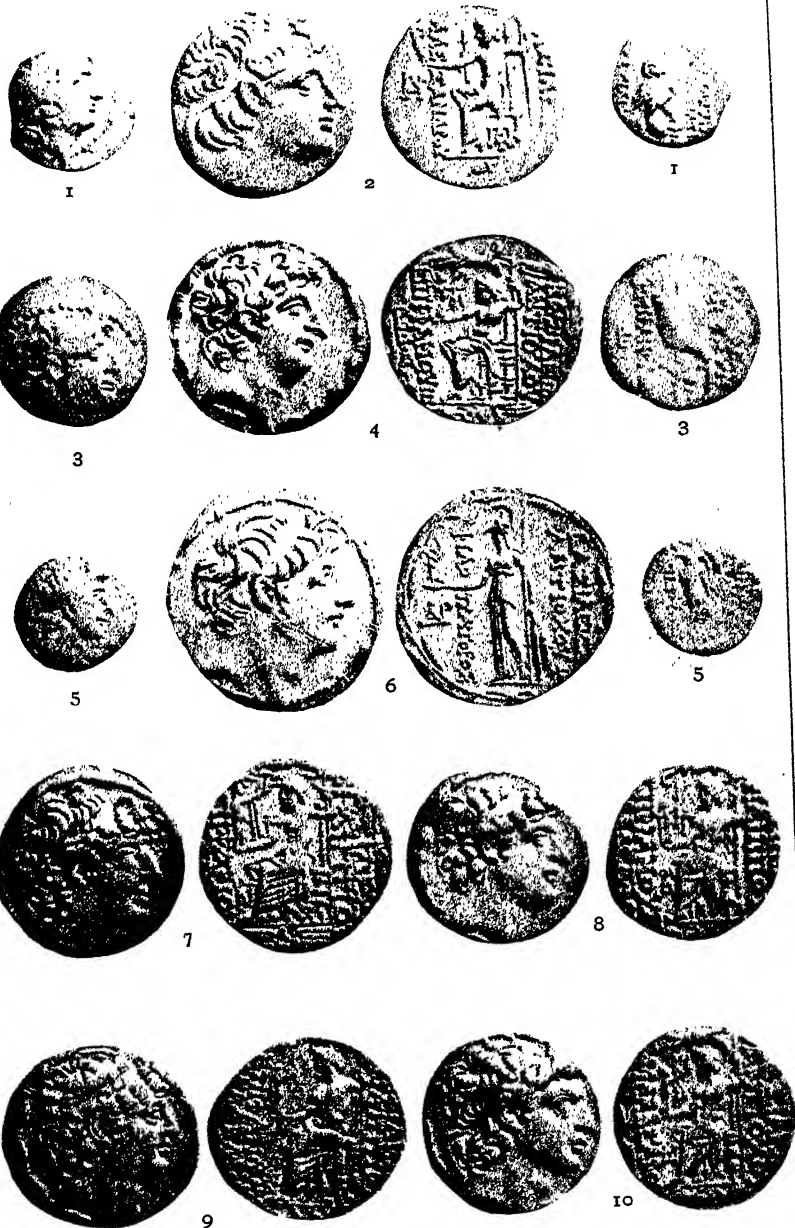
J. ALLAN.



SELEUCID KINGS OF SYRIA



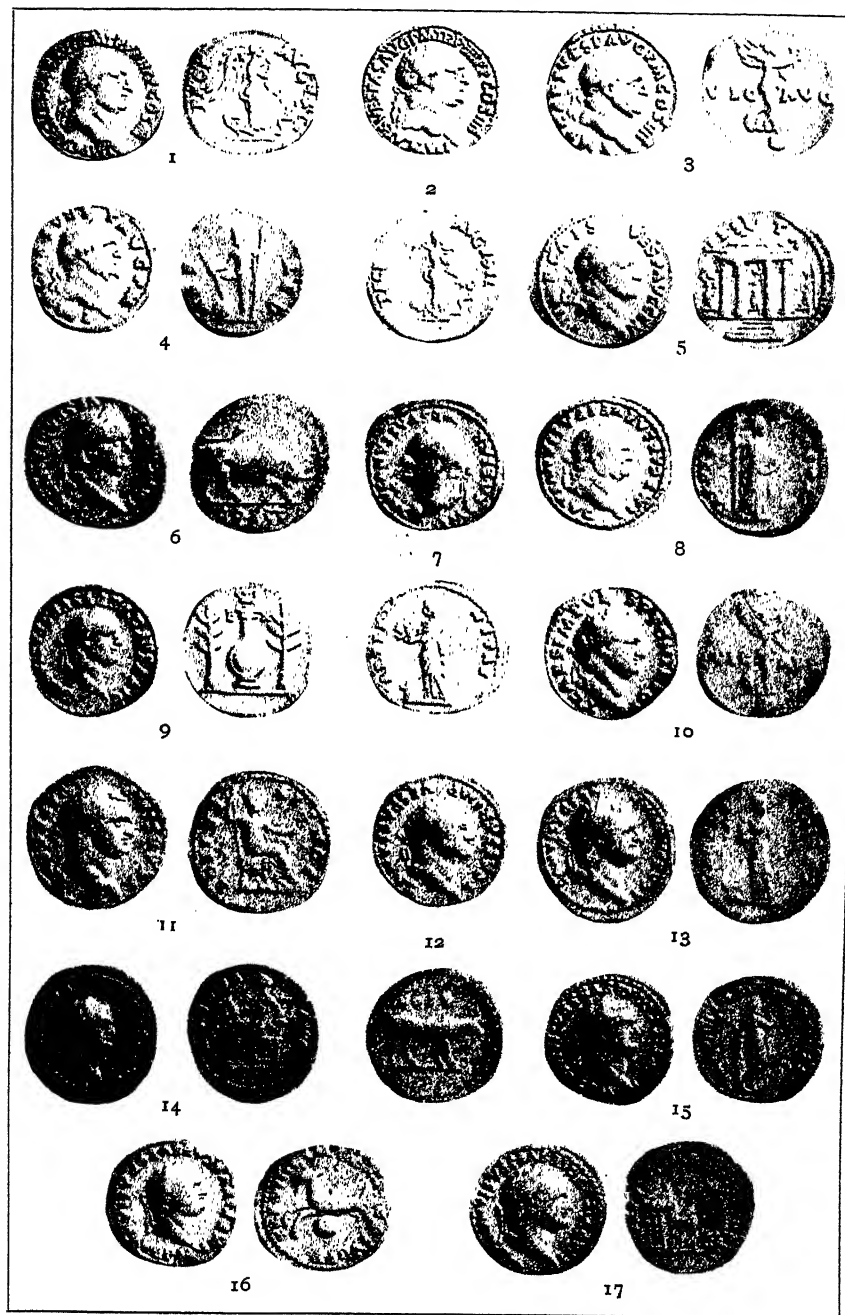
SELEUCID KINGS OF SYRIA



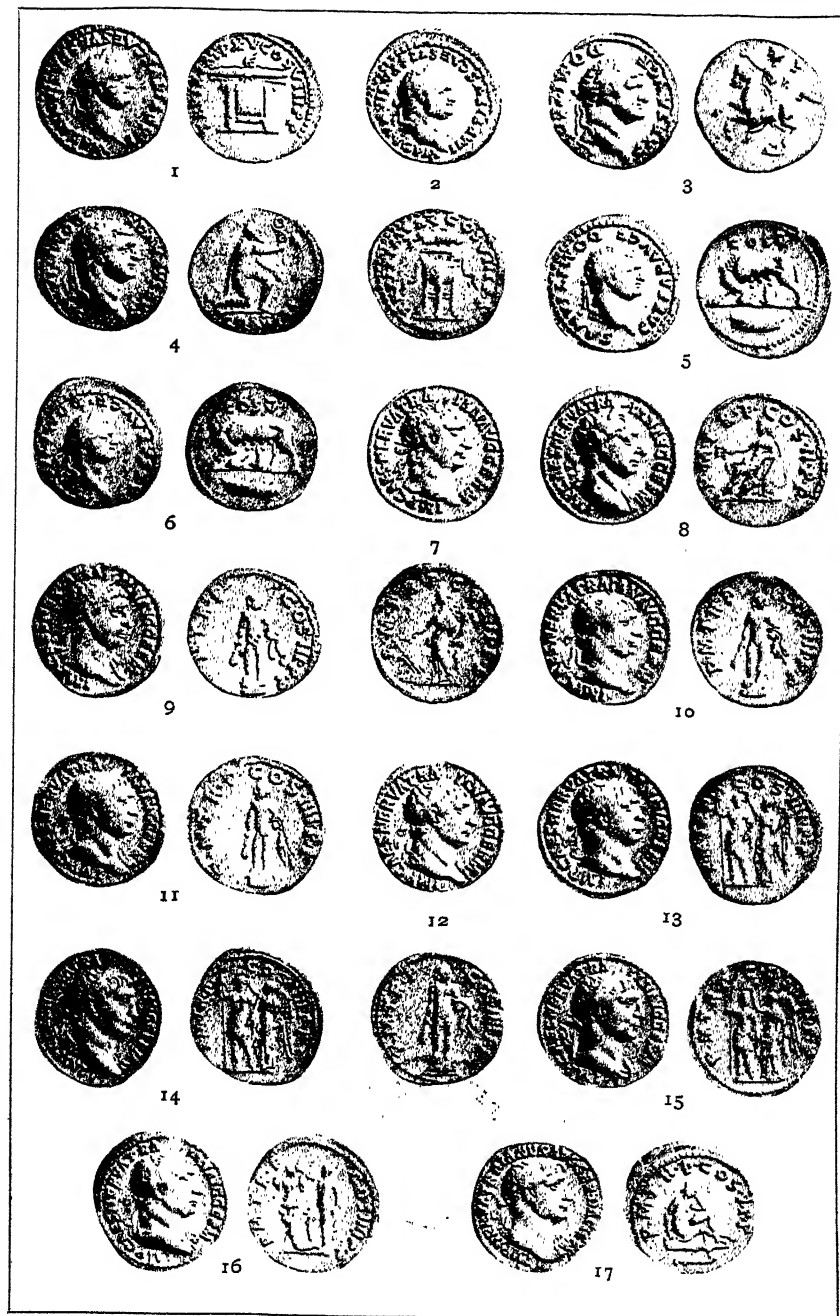
SELEUCID KINGS OF SYRIA



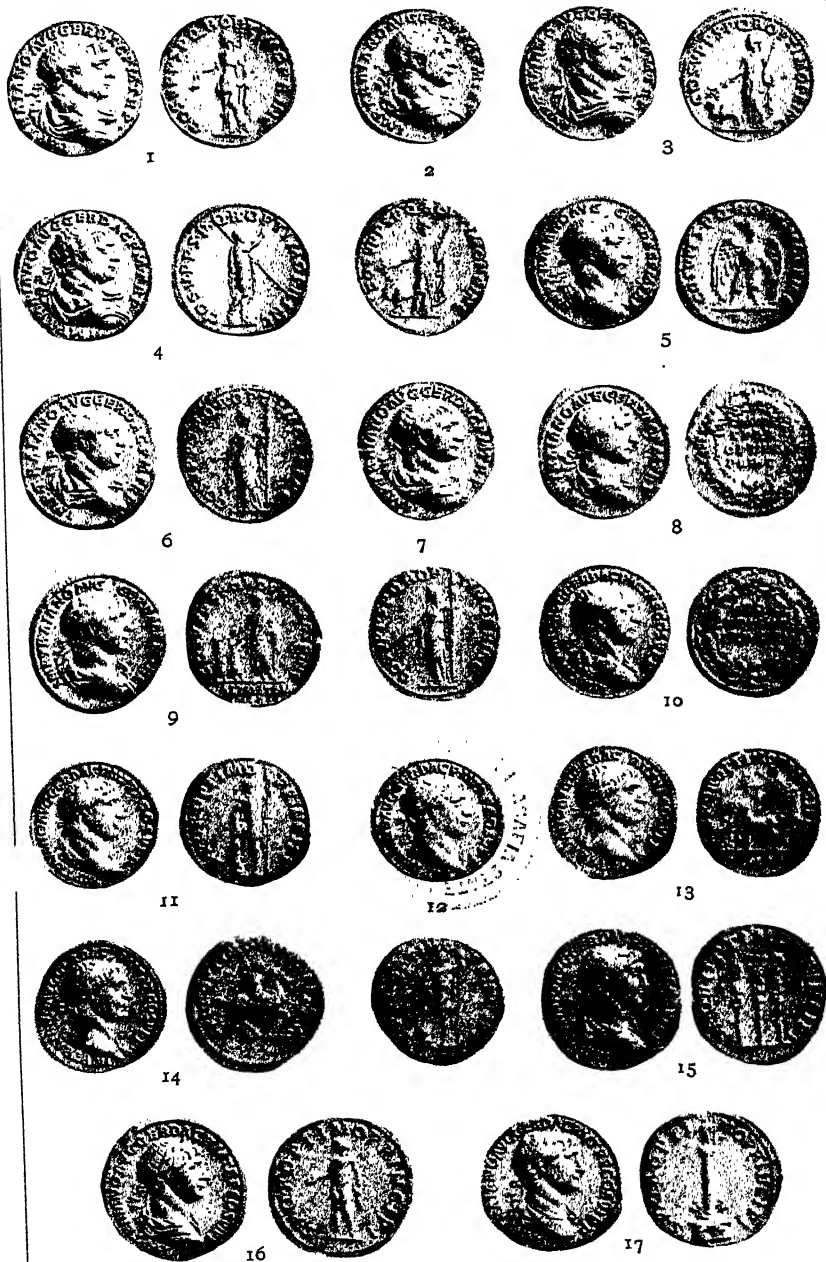
CORBRIDGE FIND (1911)
NERO—VESPASIAN



CORBRIDGE FIND (1911)
VESPASIAN — TITUS



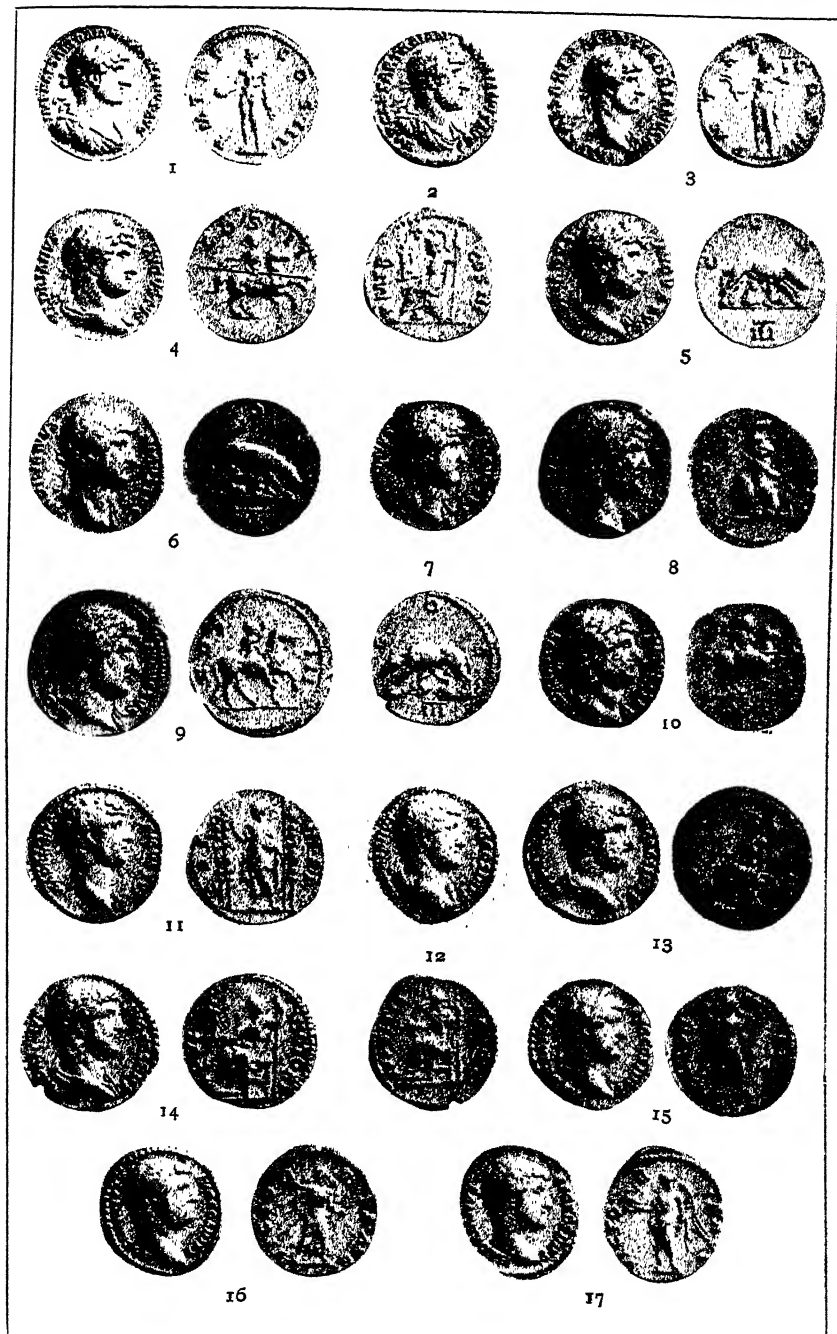
CORBRIDGE FIND (1911)
TITUS—TRAJAN



CORBRIDGE FIND (1911)
TRAJAN

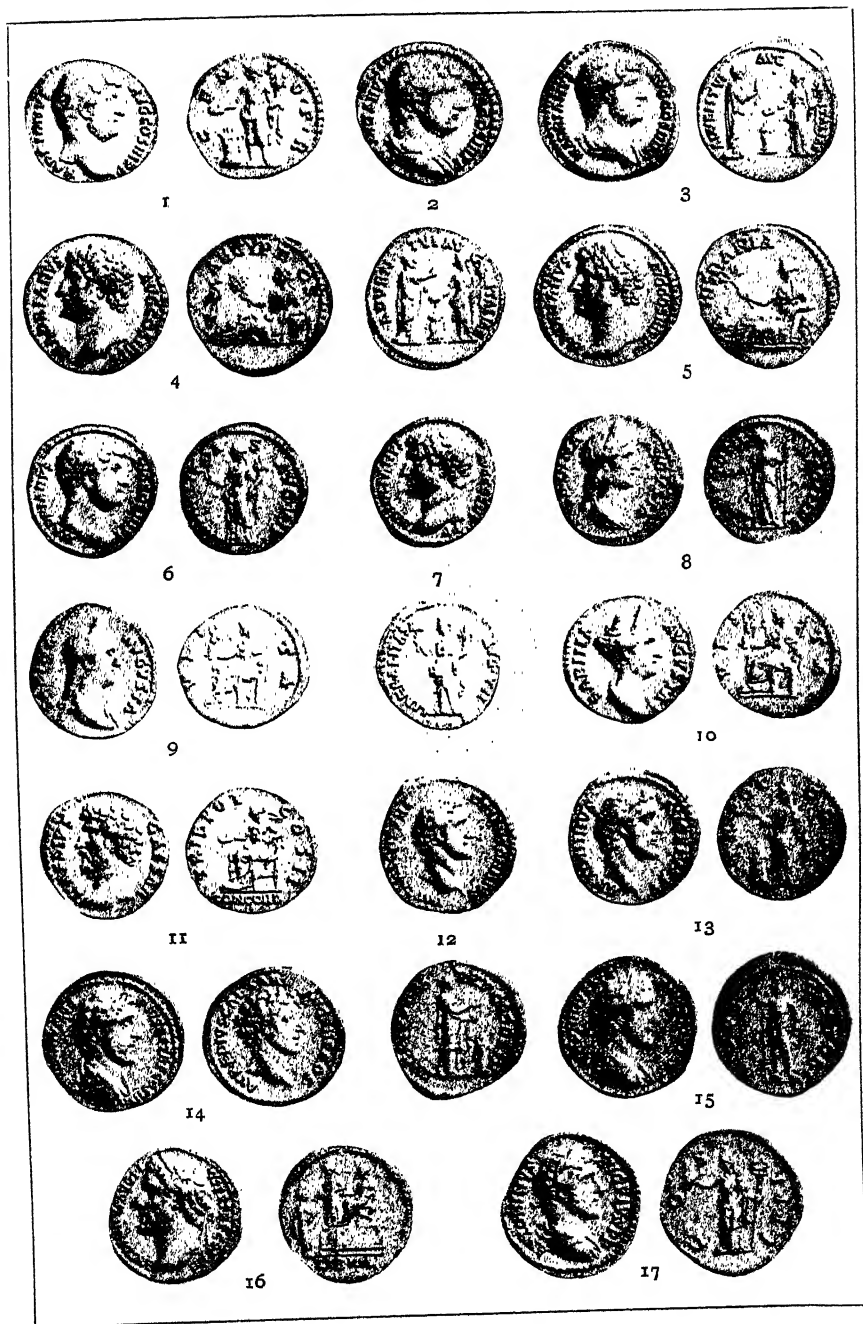


CORBRIDGE FIND (1911)
TRAJAN—HADRIAN

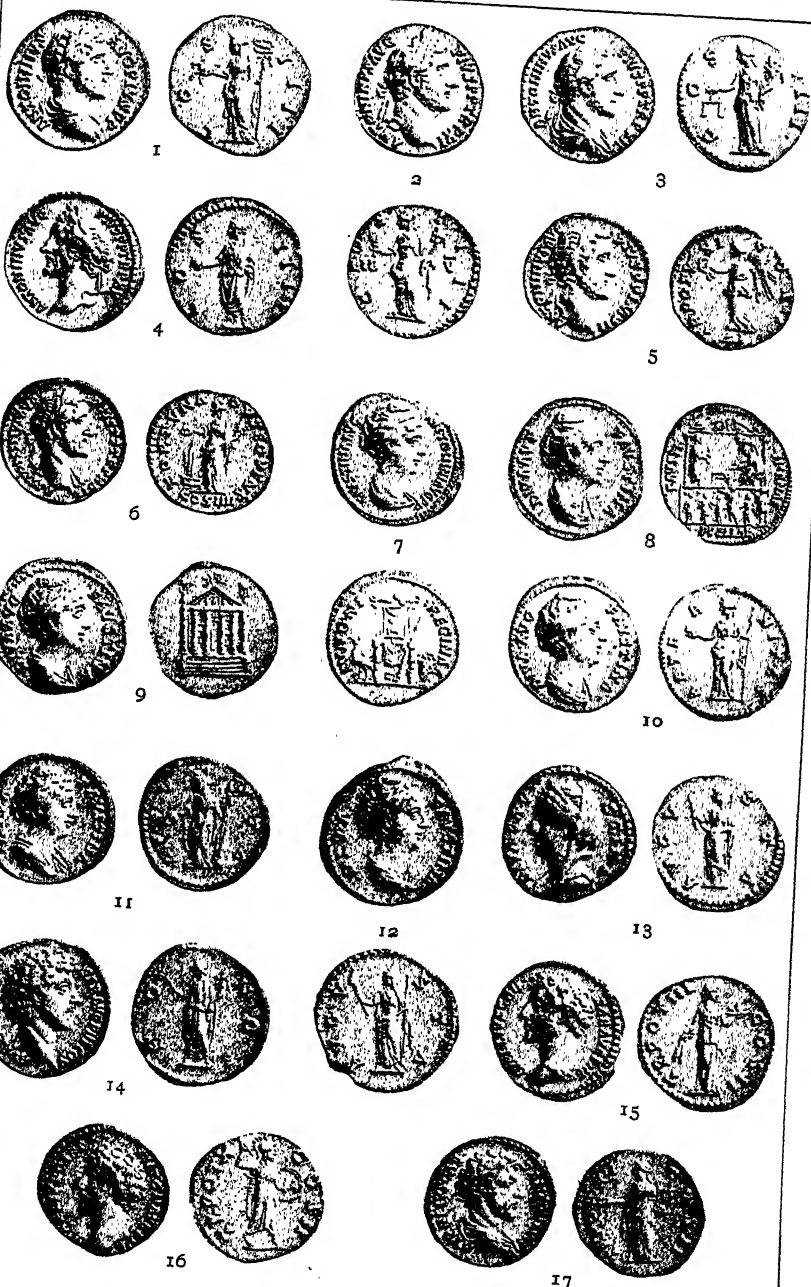


CORBRIDGE FIND (1911)

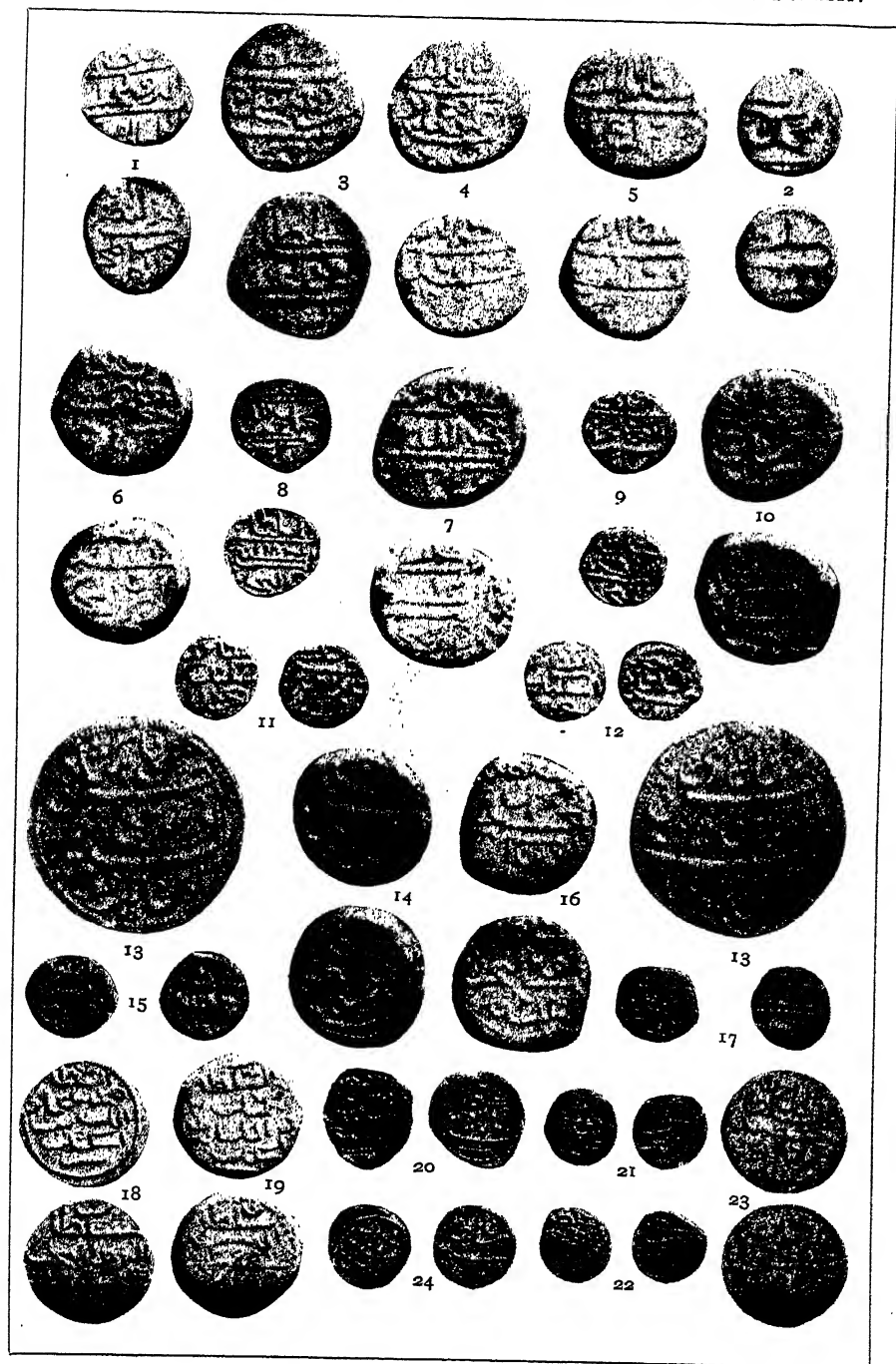
HADRIAN



CORBRIDGE FIND (1911)
HADRIAN—ANTONINUS PIUS



CORBRIDGE FIND (1911)
ANTONINUS PIUS—MARCUS AURELIUS



COINS OF THE MALDIVE ISLANDS.

THE ORIGIN OF WEIGHT.

IN any attempt to trace from the beginning the employment by man of a natural physical phenomenon, it is necessary to keep before us the development of the human mind since the days of our ancestors of the Stone Age. There should be no need to insist upon the absolute simplicity of the ideas and actions of early man. For their minds and intellects were not fully developed; their doings and thinkings would be like those of our children; and the simpler we can show their methods to have been, the more likely are our conclusions to be true. We must, therefore, be careful not to attribute to them our present idea of weight, defined as it is in the minds of most of us by the uses to which we put it. The first human conception of it would most certainly be different, and we must attempt to realize how it would arise.

The amount that a man could carry would, one would think, be the first realized amount of weight;¹ and this would be expressed in the number of such and such an

¹ O. Schrader, *Reallexikon der indogermanischen Altertumskunde*, Strassburg (1901), p. 928, points out that the Greek *τάλαντον* is related to *ταλάσσαι, τλήναι*, "to bear," *τάλαρος*, "a basket for carrying," Latin *tollo*, "I lift," Sanskrit *tul*, originally "to lift," then "to weigh." "Die Grundbedeutung von *τάλαντον* dürfte daher 'Hebung' (sc. der zu wiegenden Masse) sein."

article, or in a volume of such and such a material. The measure would not be one of weight, but of number and size in material. The present conception of weight as a form of measurement is not an elementary idea. The visual tests of size and number must have come before it in all elementary attempts at comparison. The physical phenomenon of weight, separated from the size and material in which it is expressed, would be a notion of quite late development in the human mind. The elementary idea must have been a fixed size of an ascertained material, probably conceived in the amount that a man could carry.

We are helped towards the solution of the problem of determining the earliest practical expression of weight by the fact that it was first used in determining the value of quantities of precious material, especially metals. A perusal of the *Ancient Records of Egypt*, as translated by Professor J. H. Breasted, of the University of Chicago, will satisfy the reader upon this point. Professor Ridgeway, in his *Origin of Currency and Weight Standards*, has limited its earliest employment to the measurement of quantities of gold, but he has not, perhaps, considered, from the point of view put forward here, as we shall see later, the practical use to which weight was first put. His conception of its use would seem to be as a measure of quantity rather than quality.

Though first of all only realized as the heaviness of a fixed quantity of an ascertained substance, we know from the fact that the Egyptians manufactured small weights out of stone before the end of the Old Kingdom, that the idea of weight had by that time become separated from the material in which it primarily existed. For the

weights are no longer manufactured of a fixed size and capacity of the substance of which they were a standard, but are made of another and more convenient material of equal weight, though of necessity of different bulk. We therefore find that the conception of weight had by that time progressed to a certain extent, namely, it had become separable from the material substance in which it originally existed. These early examples of weights, however, give no indication of the use to which they were actually put; it is only possible to point out that a standard weight of gold was no longer manufactured of a fixed measure and size of gold itself, but was represented in a separate material, namely, stone, of a different bulk and measurement.

In the early days of barter, the existence of a fixed or standard quantity of any substance or object, gold or otherwise, would show that the measure was a basis of comparison, and therefore would naturally be one of price. It might, therefore, easily be supposed that the earliest weight standards² known were, for the sake of example, the price of an ox, or a boat, or a measure of corn. They may have become so in the days when these weights were manufactured; but, as a simple capacity or volume of gold would have served the purpose equally well, such an exchange would not have forced into being the use of weight as a measure. For measures of number and capacity were the earliest reckoners employed, and as they were perfectly adequate for the purposes of ordinary barter, there would be no apparent reason to change them into units of weight. (For

² Griffith, *Proceedings of the Society of Biblical Archaeology*, vol. xiv. pp. 442, *seq.*

instance, 10 cubic inches of gold would be as valuable as the corresponding weight of the same metal.)

Now, as we have seen, weight was first used as a measure of the value of precious metals. So long, however, as the currency of a country consisted of objects or substances of one quality only, be it pure gold or sea-shells, number and capacity sufficed for the determination of price. There would be no need to alter the determinant into weight; the original measures would retain their position undisturbed. Directly, however, a material was introduced as a form of wealth, which depended upon its weight for its worth, the value of capacity as a determinant of price would cease. Weight thereupon became a test of quality rather than of quantity, and, as such, was necessary for the determination of different values of a precious material of this nature. We come down, therefore, to the fact, which ought to have been recognized all along, that these earliest standard weights, known as the Royal Weights of Egypt, which are marked "10 units," "4 gold units," "5 gold units," &c., are the test weights of ten measures, four measures, five measures, &c., of precious material, reckoned in measures of a given capacity. Gold, if it scaled the requisite weight per measure, would be pure gold. We can now see clearly, that if this be true, the elementary use of weight was to ascertain the value of precious metal by its specific weight or gravity, that is to say, by its weight per measure, or density.

It must be remembered that we are here examining the point of view of men who lived many thousands of years ago, and we must not allow our modern definitions of such terms as *mass* and *density* to enter into our consideration; for, if we do so, we shall fail to realize

the immense difference that exists between the modern and ancient scientific conceptions of weight.

We next approach the question, what valuable substance was of such variable weight per measure as to force upon the notice of men the recognition of weight as a separate physical quality concealed in the mass of a precious material?

The Egyptian records, as given by hieroglyphic inscriptions, which have been so ably compiled and translated by Professor J. H. Breasted, would seem to be the only authority to which it is possible to refer in this matter. As we have pointed out before, Professor Ridgeway has given it as his opinion that gold was the first material for which weight was employed, and with this the ancient records are practically in agreement. The different classes of gold, which in early times came into the market in Egypt, around the two great commercial centres lying at the First Cataract, and at Koptos, over a hundred miles north, continued, according to him, to exist well into the Greek period in Egypt, and even now can be traced in the different qualities of commercial gold current in Abyssinia. It would be too much, however, to say that these different qualities existed in the earliest periods of Egyptian history;³ but we may confidently suppose that gold of variable degrees of purity came into the hands of the early Egyptian kings. Their stewards and treasurers then occupied the place taken later by the Priests of Ammon, whose power in the treasury appears entirely predominant when we first hear of them after the recordless period of the Shepherd Kings, or Hyksos.

³ *Ancient Records, Egypt. Historical Documents*, by James Henry Breasted (1906).

Even though we may not hold the opinion that these different qualities of gold were sufficiently marked to bring about the necessity for a weight test, yet, when we consider the record of the Priests of Ammon during the Middle Kingdom in Egypt, and there note the abundant supply of electrum (a natural mixture of gold and silver), we cannot but think that this precious metal must have been known during the Earlier Kingdom. Its markedly light weight would have come under the notice of the king's treasurers, when, owing to its similarity in colour,⁴ and the predominant admixture of gold in its composition, it would be scarcely distinguishable from the pure gold of the tributes from the southern neighbours of the country.

It seems to be necessary to show the abundance of this supply of electrum, in order to prove that the varying weights of the different qualities of gold were so apparent, that they forced upon the Egyptians the necessity of taking into account weight in assessing the value of quantities of precious material, and in order to demonstrate the probability that gold was the first precious metal which introduced weight into the ordinary business affairs of commercial life.

The evidence that electrum was one of the chief imports into Egypt is to be found in many of the early records⁵ of tribute, and further, it was used to excess in the temple decorations. The green gold of Punt⁶ would certainly get its colour from the silver it contained; the weighing scene of the treasures of Punt shows piles of

⁴ The variation in the colour of electrum gives no indication to the proportion of gold that it contains.

⁵ Electrum. Breasted, *Ancient Records, Egypt*, v. index.

⁶ Punt Reliefs, Der-el-Bahri Temple. Breasted, ii. 265.

electrum,⁷ and there are many other mentions in the inscriptions of the importation of this mixture of gold and silver into Egypt. There is no need, therefore, to prove further that in the different qualities of gold found in the Egyptian market, there were a sufficient number of degrees of purity to make the weight of the metal an important factor in its value. We must take electrum, therefore, as a precious metal which, by its comparison with pure gold, probably gave the necessary object-lesson to the Egyptians of the value of weight as a test of worth in precious metal.

It may be interesting to the reader to learn that the earliest supplies of gold were obtained by chasing the inhabitants of Nubia for the beads and ornaments which they wore. It was only in the time of Thothmes II that the first tributes were raised from the mines which existed in the southern deserts. Expeditionary forces were then organized under some trusty general, or close adherent of the king, to collect the precious metal, which had already been smelted at the mines. For in these times which we are considering, no gold was imported in the rough ore; it was all in metallic condition, so that the method of assessing the value was in no wise complicated by any other process than refining. It is reasonable, therefore, to suppose that with these various examples of different qualities of metallic gold spread before them for valuation, the treasurers of the king's household would have recourse to weight as a measure of value, and as the obvious criterion of purity.

Now we have seen that measures of capacity and number were those first used by mankind, and it has

⁷ Punt Reliefs, Der-el-Bahri Temple. Breasted, ii. 274.

also been shown that, amongst the substances to which these measures were applied, there was one, namely, gold, which required the measurement of its weight per volume, to ensure the correct knowledge of its quality. To this we have but to add the fact, that gold and electrum appear to have been the first precious metals to which weight was applied. If, therefore, the phenomenon of weight was first used as a measure of value and as a criterion of purity, we should expect to find, in any accounts of weighing, an exact record of measure and weight, both of which had to be taken in order to ascertain the standard of purity and the consequent value of the precious metal. We must, therefore, turn to the records, to see if this actually be the case.

There are many references to the quantity of electrum and gold measured by the sack,⁸ or by the *heket*,⁹ the number of *deben* at which they were valued being given subsequently. The *heket* appears to be the measure of capacity in most common use amongst the Egyptians, and the *deben* was the unit of value at which goods were assessed in all temple accounts. From this we see that the fact is distinctly stated that precious material had to be measured before it was weighed, and the joint mention of both measuring and weighing leaves little doubt as to the reason for the latter. Had this last proceeding only been for the purpose of measuring and reckoning up the quantity of gold, there would have been no need to measure it first. Both factors were necessary, size and weight, to determine the intrinsic value of the bullion; when this was arrived at, the

⁸ Inscription of Thutiy. Breasted, iii. 37; iv. 550.

⁹ *Idem*, v. index.

number of units alone would suffice, and value would be on some graduated scale per *heket* or bushel.¹⁰

There are many additional pieces of evidence that tend to prove that weighing was primarily used for the determination of worth and purity, in contradistinction to a means of reckoning an amount of the substance weighed. We have in the Harris Papyrus a record¹¹ of the manufacture of balances for Rameses III. "I made for thee balances of electrum; the like of which had not been made since the time of the god. Thoth sat upon it as guardian of the balances, being a great and august ape of gold in beaten work. Thou weighest (doest the weighing) therein before thee, when thou (reckonest or appraisest (?)) of gold and silver by the hundred-thousands." *Thousands* would seem to be the technical term for thousands of certified *deben*.¹² The symbolism of the purity of the beaten gold, in which the ape of Thoth¹³ is manufactured, when compared with the electrum, or baser metal of the balances, is very significant.

Further, we may turn to the *Book of the Dead*, the most sacred and ancient of Egyptian rituals, and examine the words used in connexion with the weighing which forms its climax.

There are many chapters to this book which were handed down from the most ancient traditions of the country, and their order in date is not known. But we

¹⁰ *E.g.* different qualities of grocery at so much a pound.

¹¹ Breasted, iv. 256.

¹² The measure by *thousands* would appear to be the reduction of a mass of precious material to its value in standard *debens*; *vide* Inscription on walls of Medinet Habu treasury, *idem*, iv. 30; Punt Reliefs, ii. 278; *Psalm* cxix. 72, "thousands of gold and silver."

¹³ Thoth, the Recorder.

must take it that this weighing scene, which describes impressively the scene of the Last Judgment of the Dead, has in it all the elements of truth with regard to the earliest use of balances by the Egyptians. All we need say here, with regard to this sacred ordeal prescribed by the Egyptian religion, is that the heart of the dead has to pass the scales, whatever that may indicate.¹⁴ The *Ka*, too, or *alter ego*, of the deceased, is also subject to the test, and it may be that all the parts of the dead man, spiritual or animal, had in turn to be weighed and tested.

What, however, concerns us here, is the object and result of the weighing.

Just before weighing, we have this phrase spoken on behalf of the dead, "I am here with Osiris, my measure is his measure."¹⁵ Therefore we have the dead already measured and prepared for the weighing. The *Ka* and the heart have already been invoked on his behalf: to the latter the appeal has been made, "Let there be no fall of the scale against me in the presence of him who is at the balance;"¹⁶ to the former, "The scale of the balance rises, Truth (or Law) rises high to the nose of the god."¹⁷

Then comes the weighing scene.¹⁸ Thoth with his note-book does the recording; Maat, the goddess of justice, law, and all that is immutable and unchangeable, stands by; she is also the deity of measures, and perhaps standards. In one pan of the scales is her feather, emblematic of justice, truth, and correct measure; in the other pan is the heart.

¹⁴ It may be that the heart was the tribute paid to the gods before entering the divine circle or community.

¹⁵ Renouf, *Book of the Dead*, cxxiv.

¹⁶ *Idem*, xxx. a.

¹⁷ *Idem*, cv.

¹⁸ *Idem*, cxxv.

If that which is best happens for the dead, the feather of Maat, emblematic of truth, will "rise high to the nose of the god." Then the heart will have shown itself heavier than the bare standard of the law; heavy enough to show the purity of its composition, unalloyed by traces of sins which have been purged away by the funeral rites.

Then the dead sings, "I come to thee, Lord of Light, glorified and purified." He has passed the final test of the weighing. So the soul passes up the steps to the Circle of the Gods, with the assured and joyful cry, "I am pure, I am pure, I am pure, I am pure."¹⁹ He sings anthems to his purity, for he has been "weighed in the balances, and" not "found wanting."²⁰ Job, in his protestation of his integrity, desired this trial: "Let me be weighed in an even balance," he cries, "that God may know mine integrity."²¹

Weighing, therefore, was the test of purity, and purity that of worth. In the very ancient days, when the *Book of the Dead* was composed, this conceit of the weighing scene was humanly inspired, and imagined as taking place in the judgment hall of the dead, in poetic symbolism of the earthly test for purity of refined gold that had passed through the furnace. It would naturally be thought that the soul of the dead should be tested in a similar manner, and with the same object. What was thus poetically imagined for the lower world, would be true of the upper. The weighing, therefore, of precious metals upon earth would be to test their purity and value; and for this purpose only were

¹⁹ Renouf, *Book of the Dead*, cxxv.

²⁰ *Book of Daniel*, v. 27.

²¹ *Book of Job*, xxxi. 6.

the scales used when *first* they were employed by mankind.

Again the reader must remember that he has before him the very ancient idea of weight as realized by men of long ago, and he must not consider that his modern conceptions of density and mass were then ordinary thoughts. The narrative will suggest sufficiently well the difference between the old and the new, to show him that the idea of those days was something totally different, and perhaps less simply expressible.

The employment of weight as a determinant of quality or worth survives in its scientific use to this day. It is, in fact, only the lay mind which conceives it as a measure pure and simple. The accuracy of balances and their general use have made its employment for the measurement of small quantities not only possible, but an absolute necessity. It must be remembered, however, as Professor Ridgeway points out, that many of our weights bear names which are those of measures of capacity.²² The true use survives in the determination of specific gravity, which was in reality the employment first given to weight.

It is idle to suppose that Archimedes, in the middle of the third century B.C., was the first to discover the difference in weight between equal quantities of gold and silver; for that is what the statement that he discovered specific gravity in reality amounts to. His researches were in the direction of the accurate measurement of the capacity of certain well-known shapes, probably for purposes of weighing, as a glance at his

²² *Origin of Currency and Weight Standards*, p. 115. "The English coomb, the Irish barrel, the bushel, and the peck, are indubitable evidence."

written works will show. The following are preserved to us: *On the Sphere and Cylinder*, *On the Measurement of the Circle*, *On Conoids and Spheroids*, *On Spiral Lines*, *The Psammities* (sand-reckoners), *On the Equilibrium of Planes and their Centres of Gravity*, and *On Floating Bodies*. The course of his studies is very clear, and the hydrostatical element involved in his work on floating bodies would naturally bring before him the important factor of the weight of water displaced by a given enclosed body. Upon this displaced weight of water, which obviates the necessity of accurately measuring the surfaces of an enclosed body, in order to arrive at its contents, the modern and easy method of estimating the specific gravity of a substance is based. It was only this simple method of determining the weight per capacity that Archimedes discovered. To obtain the required result before his time, accurate surface measurements were necessary, and certain shapes, as, for example, the crown, which has been made famous by the popular story of his discovery, offered insuperable difficulties. Hence, it is natural in every way that, in days so long before his time as those of the Middle Egyptian Kingdom, we should find that precious material was measured before it was weighed, and that it was manufactured into definite shapes for that purpose, *e.g.* rings in Egypt.

There is, as we have shown, much corroborative evidence of this measuring and weighing; there is also mention of flat plates of gold "which could not be weighed,"²³ presumably because their worked surfaces defied measurement. The inscription of Thutiy²⁴ gives

²³ *Annals of Thutmose III.* Breasted, ii. 447.

²⁴ *Inscription of Thutiy.* *Idem*, ii. 377.

us the best example of the Egyptian method of estimating their wealth.

"His majesty commanded to make . . . of electrum of the best of the highlands, in the midst of the festival hall; measured by the *heket* for Amon, in the presence of the whole land.

"Statement thereof:—Of electrum $88\frac{1}{2}$ *heket*, making . . . ($x +$) $57\frac{1}{2}$ *deben*; for the life, prosperity, and health of the king—life for ever."

This is the record of the weighing of the electrum after the return of the expedition from Punt. It is the natural corollary to the weighing scene in the relief describing that undertaking, cut upon the walls of the temple of Der-el-Bahri. The electrum is measured and weighed, and the number of *deben* it contains stated; for there can be little doubt that a *deben* is a unit of value, and not an absolute weight, and that its weight differs with the precious material of which it is manufactured.

If proof of this were needed, we have the inventory of the goods of Rameses III, given in the Harris Papyrus. There the *deben* of gold, electrum, and silver are added together, giving a total value; this is done in each of the many separate accounts, and if the weight, not the value, was the reckoner, there could be absolutely no sense in the proceeding. Hence we must take it, that the Egyptian *deben* was a value; and that it was estimated for precious metals from the weight per measure of the material.²⁵

²⁵ The innumerable stone weights, every one of which is different in its value, found at Naukratis and elsewhere, and enumerated at length by Professor Petrie and others, are easily explainable as the tallies of different consignments, and as recording the weight per measure of their respective consignments, which would be equivalent in value to a recognized and accurate weight of standard metal. They would, in fact, each be an elementary *στατήρ*.

There is no word giving an absolute weight in the ancient Egyptian records; hence the conception of weight in the minds of those early people must have been of the nature of a test, and the use to which it was put, was to estimate the purity and value of precious material. Again we turn to the weighing scene in the *Book of the Dead*, from which the scales of Justice may—*longo intervallo*—be descended, and read how the soul, refined and measured in the course of the funeral ceremonies, passes the final test of the God of Justice of the Egyptians, and approaches the supreme divinity, after being weighed, with the resulting joyful exclamation: "I am pure, I am pure, I am pure, I am pure."²⁶ Beyond this there can be no necessity to go, and there is little doubt that we have now discovered the manner in which the phenomenon of weight was first used, corroborated as it is by the truths of a religious ceremony; and this idea of weight per capacity must have been the dominant meaning for many centuries, as a determinant of value of precious metals.

We do not mean to say, however, that weight was not used directly and simply in relation to precious metals; but that the result of the weighing was so many values rather than so many weights. To weigh and to value were practically synonymous. Weight and value, however, were not equally so; weight per measure determined the value of a specific valuable material. If, as the result of weighing, a certain number of measures of pure gold weighed ten *leben*, the value of that amount was ten *leben*. A heap, however, of ten *leben* would be a

²⁶ "Blessed are the pure in heart, for they shall see God," *St. Matt.* v. 8, comes direct from the holy religion of Egypt.

heap of the value of ten *deben*, and not a heap of so many *debens* or pounds weight.

The Greek verb ἵστημι would seem to carry on the Egyptian idea of estimating "of gold and silver by the hundred-thousands,"²⁷ and thereby fixing or appraising the value of a quantity of bullion.

Xenophon, *Cyropaedia*, 8. 2. 21, gives us the whole process of valuing goods, in much the same way as we have seen took place with the Egyptians. τὰ δὲ ἀριθμοῦντες καὶ μετροῦντες καὶ ἱστάντες (sc. χρήματα). He again has the same sequence in *Memorabilia*, i. 19.

The silver tablets found in the temple of Artemis at Ephesus evidently use the word ἵστημι in the same sense.²⁸ Herondas, vii. 68, says, καὶ στήσον ἥς κοτ' ἐστὶν ἄξιον τιμῆς.

This true meaning of *appraising* by weight per capacity continues in the Latin *aestimare*, and it is difficult to see how it ever had any other meaning, when dealing with precious material. In fact, absolute weight, *per se*, seems to vanish from the meaning of the word, weighing being the only one and the original process of determining value.

Hence in all dealings with ancient weights, we must limit their use and meaning to weight per capacity, and look upon them as standards of purity and value, and not as measures of quantity.

Pollux, *Onomasticon*, ix. 57, distinctly corroborates this statement: ὁ δὲ χρυσοῦς στατήρ μνᾶν ἡδύνατο. "Now the gold stater was equivalent to a mina." The gold valuer is a measure (which is of standard weight).

καὶ γάρ ἐν τοῖς ἱσταμένοις τὴν μνᾶν τῆς ῥοπῆς στατήρα

²⁷ Psalm cxix. 72.

²⁸ *Excavations at Ephesus*, Hogarth, p. 123. τετραφοντα μναι το πρῶτον εσταθησαν εκττων δ . . . χρυσο (archaic Greek).

ὀνομάζουσι. "For when things are valued (precious metals are weighed), they call *the* measure which tips the scale (that is, which is of standard weight) *a* stater."

καὶ ὅταν εἴπωσι πενταστάτηρον, πεντάμουνν δοκοῦσι λέγειν "and when they say πενταστάτηρον (which in the time of Pollux would naturally mean 'of the value of five staters'), they seem to mean πεντάμουνν" (which is five measures of standard weight; in the time of Pollux a standard weight simply).

ὡς ἐν τῇ Σωσικράτους παρακαταθήκη; as in the *Deposit* of Sosikratos (*circa* 300 B.C.)

ὅταν γάρ, οἶμαι, λευκὸς ἄνθρωπος παχύς
ἄργος λάβῃ δίκελλαν, εἰωθὼς τρυφᾶν,
πενταστάτηρον, γίγνεται τὸ πνεῦμ' ἄνω.

"I fancy when a pale and podgy man,
A lazy fellow given up to luxury,
Picks up a pitchfork for five staters good,
His broken breath comes wheezing thickly forth."²⁹

The example is intended to be clear evidence of the original synonymy of weight and value. It demonstrates that *στατήρ* would suggest a weight, that being the determining incident of value; though *μνᾶ τῆς ῥοπῆς* would be a better expression. Obviously there is no word for weight which has not also the significance either of value or measured size. Parenthetically this passage also shows that a pitchfork originally contained a measure of copper of an ascertained value.

ἔστι μέντοι καὶ νόμισμα στατήρ. "For all that a stater is also a coin."

Finally, we come to the passage from Aristotle (written *circa* 335-323 B.C.), *Polit.*, i. 9, 1257a, 31 *seq.*: "For as

²⁹ The translation is by A. B. Cook, to whom I owe my best thanks for this, and many confirming references.

the benefits of commerce were more widely extended by importing commodities of which there was a deficiency, and exporting those of which there was an excess, the use of a coinage was an indispensable device. As the necessaries of Nature were not all easily portable, people agreed, for the purposes of barter, mutually to give and receive some article which, while it was itself a commodity, was practically easy to handle in the business of life, some such article as iron or silver, *which was at first defined by size and weight* (value); although they finally went further, and set a stamp upon every coin to relieve them from the trouble of using the scales, as the stamp impressed upon the coin was an indication of *how much* it was worth. Thus it was after the invention of a coinage (not necessarily stamped), as the result of necessary barter, that . . . Retail Trading came into existence, at first simply by equal barter, and afterwards, as experience progressed, more and more as a scientific means of gaining a large profit."

We therefore find Aristotle saying that the valuer, or *stater*, was at first defined simply by both size and weight, but that when the stamp was put on it guaranteeing the coin, further weighing (or valuing) was unnecessary, as the stamp was sufficient to show how much it was worth. The stamp does not give its measure of weight, but its standard of purity.

With this present in our minds, we see in the *leben*, the *stater*, and the *solidus*, the units of barter or price originally determined in amount for the precious metals by the weighing per capacity of the peculiar metal or quality of metal in which each was expressed.

The talent, too, was used by the early Greeks in this way; for the Homeric gold talent is the direct

progenitor of the gold stater,³⁰ while the talent of copper is given by the ingots found in Crete, Sardinia, and Cyprus.³¹ We must note, too, the meaning of the word *ταλαντοῦχος* (*τάλαντον*, *ἔχω*), *holding the scale*; metaph. *turning the scale* of battle. The similarity of use when compared with *μνᾶ τῆς ροπῆς* is significant. A talent may perhaps mean the amount that turns the scale. This, however, would be a derived interpretation apart from the original meaning of that which is carried as tribute.

Originally, all kinds of goods were estimated in this class of unit, *vide* the Harris Papyrus; later, only the precious metals, being used as money, were weighed out as *staters*, or units of price.

We are therefore led to the conclusion that weighing and valuing were synonymous in the earliest days, and that weight was only present in the practical minds of commercial men as the test of value, which was determined by the heaviness of a standard measured quantity of a stated precious material.

The change from this idea of a measure of quality to one of quantity would come gradually from the use of scales; and though for many scientific purposes the conception of weight is still the same, yet the daily use of balances and weights, for the measure of quantity, has so overshadowed the original use, that the classical student of the present day may well be forgiven for his conception of weight as a measure of quantity, and nothing further.

J. R. McCLEAN.

³⁰ Ridgeway, *J. H. S.*, vol. x. p. 92.

³¹ *Corolla Numismatica*: A. Evans, "Minoan Weights and Currency."

XVI.

HELENA N. F.

(See Plate XXI.)

M. JULES MAURICE, in the second volume of his *Numismatique Constantinienne*, p. 456, says—"Les deux Nobilissimae Feminae doivent être la jeune Hélène et Fausta," and again, "Les effigies de la jeune Hélène présentent des cheveux ondulés sans aucune décoration spéciale. La figure est très jeune et plus ronde que celles de Fausta ou de Helena Augusta. Les traits sont un peu lourds, beaucoup moins fins que ceux de Fausta et moins caractérisés que ceux de Helena Augusta. On peut distinguer la jeune Hélène à ce qu'il me semble après examen, de Fausta comme de Sainte Hélène."

M. Maurice is so accurate an observer and so logical a thinker that one hesitates to differ from him, but I think that in this matter there is ground for doubting the correctness of his conclusion.

It seems clear from the context that he attributes the coins reading FAUSTA N. F. to the wife of Constantine the Great, and with that attribution, which carries me some way towards my goal, I entirely agree. The profile on the rather poor specimen of the coin reading N. F. from the Mint of Thessalonica illustrated by him (Pl. xiv. 6) is similar to that on the beautiful piece from the same mint inscribed FLAV MAX FAVSTA AVG which

he also illustrates (Pl. xiv. 11), and I have seen other specimens of the former coin with and without mint-marks which certainly bear portraits of the lady who appears on the coins of Arles, Nicomedia, Trèves, and other mints with the title of Augusta. A specimen of the N. F. type without mint-mark, another marked TSA, and one of the Augustan type from Nicomedia, will be found on the plate illustrating this paper [Pl. **XXI.** 26, 27, and 28].

The author gives cogent reasons for fixing the issue of the N. F. coins in 323 and 324 A.D., and he quotes from Theophanes the statement that Constantine crowned his mother, St. Helena, in the year 325, and accorded her the honour of having monies struck in her name. For this and other reasons he includes the Augustan coins of Helena and Fausta in the issue which took place between November 8, 324, and the execution of Fausta in August, 326. Those of Helena continued to be struck for some time afterwards, while those of Fausta ceased at her death. The N. F. coins were therefore issued before St. Helena was accorded the honour of appearing as Augusta with the diadem.

It is admitted that the coins in honour of the mother and the wife of the Emperor on which the title Augusta occurs were simultaneously issued, as also were those reading HELENA N. F. and FAVSTA N. F. In default of evidence to the contrary, one would expect to find the same two ladies classed together in each issue.

Of St. Helena and Fausta Augusta much is recorded, but Helena the younger does not find any mention in history, and were it not for the fact, to which M. Maurice refers, that her name is coupled with that of Crispus in the Theodosian Code, in a manner which leads to the

conclusion that she was his wife, we should have no documentary authority for her existence. It therefore requires clear evidence to justify the attribution of coins to her, especially as none of the other younger ladies of the Imperial Court received such honour. I have not overlooked the extremely scarce piece inscribed CONSTANTIA N. F., but this coin was, as M. Maurice shows, not issued till many years later.

Crispus was born about the year 300, and put to death in 326 when he had only attained to the dignity of Caesar. His wife was probably younger than himself, and was certainly a personage of no great note or she would hardly have been ignored by the historians. Is it likely, therefore, that her father-in-law would have accorded her a coinage in company with the Empress his wife, while his mother, whom he deservedly held in the highest honour, remained without this distinction?

Again, if Constantine honoured Helena the younger by placing her portrait on coins, why did he do so for so short a time, and in so limited an issue as that bearing the title N. F.? One would at least expect her coinage, once commenced, to continue in issue concurrently with the new series in honour of his wife and mother, especially as the coinage of her husband Crispus was still in circulation.¹ If, on the other hand, one assumes that Helena N. F. was the mother of the Emperor, then it is not surprising to find that the whole N. F. issue gave place to a new and more important series honouring the same ladies under the higher title. This was admittedly so with the coins which bear the name of Fausta.

¹ M. Maurice considers that it continued at least till March 1, 326. *Num. Chron.*, Series IV. Vol. III. p. 273.

The case for Helena the younger seems therefore to have little to support it but the appearance of the portrait on the N. F. coins, and unless that portrait shows a face younger than that of Fausta and much younger than that of St. Helena, as depicted on the Augustan series, that support may also fail.

In 323 St. Helena was between 70 and 80 years of age, Helena the younger could not well have been more than 25, and Fausta, who married Constantine in 307, was probably not under 35. We may gather that the moneyers of those days did not altogether neglect to flatter their Imperial mistresses, for the coins of Fausta depict a lady who might well have been ten years younger than she actually was at the time of their issue. The presumption is, therefore, that each lady was older, not younger, than she is depicted on any coin.

I suggest that an examination of the coinage of Helena Augusta will show that in most mints she is portrayed as a lady considerably older than Fausta, and even in some few, notably that of Trèves, where her portrait is more youthful, it is still older than that of her daughter-in-law.

The coins of Rome, Arles, and Antioch depict a lady who may even be over 70, while some of those of Trèves suggest a lady not over 30, and yet it is impossible to doubt that all of them, bearing as they do the diademed portrait of the Empress and the reverse legend *SECVRITAS REIPVBLICE* were struck in honour of St. Helena.

The uniformity of the reverse type precludes the attempt, which might otherwise have been made, to attribute the coins to the elder or younger lady in accordance with the apparent age of the portrait.

Neither in this series nor in that issued in 337 A.D. in commemoration of St. Helena and the Empress Theodora (the second wife of Constantius Chlorus), who were both then dead, was the same reverse type used on the coins of two Empresses.

The further fact that all the coins of Helena Augusta bear the diadem is conclusive on this point, for that honour was not granted even to Fausta, the reigning Empress, and therefore could not possibly have been allowed to her daughter-in-law, the younger Helena.

We may here note that one mint, that of Trèves, did issue a coin inscribed FLAV MAX FAVSTA AVG, bearing a diademed bust, but this was only a moneyer's error, for the portrait is undoubtedly that of Helena and the reverse legend is SECVRITAS REIPVBLICE [see Pl. **XXI**. 29].

It therefore appears that the mere fact that a portrait is young does not exclude the possibility that it was intended for St. Helena (and this may be so whether the title reads AVG or N. F.), while, on the contrary, an old portrait cannot be that of the younger Helena.

The coins of Helena N. F. are rare, but I have examined two fine specimens (one of which is figured on Pl. **XXI**. 1) and a number of illustrations, notably those of MM. Maurice and Gnechi. Differing with much diffidence from those eminent authorities, I quite fail to find the indication of youth which they discover. The coins seem to me to portray an aged lady with a grave and thoughtful face (older indeed than any portrait of Helena on the Augustan series, except perhaps that struck at Rome), supported by a strong neck and a broad bust, which, though rounder than that of Fausta, is so because it is older, not younger. It is, perhaps, not too fanciful to say that the face is saintly. The

appearance of age is less marked on some of the illustrations, but I think they are quite consistent with it. The features seem to me to comprise a steady and serious eye, a large nose, somewhat curved, a mouth larger and firmer than that of Fausta, a projecting chin, and a finely rounded jaw.

Comparing these coins with good specimens of the Augustan series, I think that the jaw and chin are similarly depicted in most of the mints. Even the youthful portraits of Trèves seem to show these features, while some pieces of Antioch, Heraclea, and Nicomedia do so most clearly. The nose and mouth are almost exactly reproduced at Rome, and there are several mints, *e.g.* Antioch and Arles, and (as to the nose) Constantinople, in which some of the moneyers actually exaggerated them.

The same features may also be traced in some of the PAX PVBLICA coins of the commemorative issue in 337, though by reason of their small size and somewhat inferior workmanship, the point is not very clear. The coins of Alexandria [see Pl. XXI. 2] bear portraits which are exceptional and of little artistic merit. M. Maurice has not overlooked this, and points out that the position of this mint was itself exceptional, it alone being separated from the Central Government by the sea, and that it may well be that the authentic portrait of the Empress had not arrived when the issue was made. It will also be remembered that the portraiture on many other coins struck in Alexandria during the Constantinian period is poor.

It may be noted that in many mints special care seems to have been taken in the issue of the Augustan series of both Helena and Fausta, and the coins are

distinctly superior to most of the contemporary small bronze pieces. The coins of the N. F. series are also very carefully engraved.

To sum up, I venture to suggest that a careful examination of the portraits on both series of coins discloses nothing which conflicts with the theory that arises from such historical facts as are available, but on the contrary lends it much support, and I think we may safely hold that the only Helena depicted on the coinage of the Roman Empire is the lady known to us as St. Helena.

On p. 130 of his work M. Maurice mentions a curious and unique piece in the cabinet of Col. Voetter struck in the name of FL IVL HELENÆ AVG with the reverse type GLORIA EXERCITVS, and suggests that it may be attributable to Helena the wife of Julian. If this attribution was correct it would be the only known coin bearing the name of that lady.² M. Maurice does not illustrate it, but I venture to suggest that it is but an accidental combination of the obverse of the PAX PVBLICA type of 337 A.D., with a reverse which was then common but ceased to be issued before the reign of Julian.

It is well, perhaps, to add a word with reference to the converse view to that of M. Maurice which has been taken by some numismatists, viz. that the N. F. coins are those of St. Helena and the Augustan series that of Helena the younger. The arguments against this view are similar to those urged against an attempt to divide the Augustan series between the two ladies. The use of the diadem in the one case and its absence in the other are conclusive, and, as

² *Num. Chron.*, Series IV. Vol. X. p. 247 (1910).

above mentioned, the mint-marks prove that the Augustan series of Helena, though not of Fausta, continued after the deaths of Crispus and Fausta, when the younger Helena must have fallen into obscurity. M. Maurice shows this clearly, and it seems that the above-mentioned theory is quite untenable.

In selecting coins for illustration, I have, so far as space will allow, included several specimens from such mints as present any marked diversity in their treatment of the portrait. These variations no doubt arise from the employment of several engravers. The reverse types of Nos. 1, 26, and 27 are as shown in No. 1. Those of Nos. 2 to 24 inclusive and of No. 29 are as shown in No. 2. No. 25 is of the PAX PVBLICA type, and No. 28 is of the common type of the Empress Fausta with the legend SALVS REIPVBLICAE.

The following is a detailed list of the coins, the mint-marks being exergual unless otherwise shown:—

HELENA N. F.

No. 1. Without mint-mark.

FL. HELENA AUGUSTA.

No. 2.	Alexandria	.	SMALB
„ 3.	Antioch	.	SMANTI
„ 4.	Similar, but with varied portrait.		
„ 5.	Antioch	.	SMANTZ
„ 6.	Arles	.	$\frac{T | F}{PCONST}$
„ 7.	„	.	$\frac{S | F}{ARLP}$
„ 8.	Constantinople		$\frac{A | -}{CONS}$

No. 9.	Cyzicus .	. SMKΓ●
„ 10.	„ .	. SMKA●
„ 11.	Heraclea .	. SMHЄ
„ 12.	London .	. PLON
„ 13.	Lyons .	. PLG
„ 14.	Nicomedia .	. SMNΓ
„ 15.	„ .	. MNS
„ 16.	Rome .	. RQS
„ 17.	Sirmium .	. SIRM
„ 18.	Siscia .	. ESIS∪
„ 19.	Tarragona .	. T∪T
„ 20.	Thessalonica .	. SMTSΓ
„ 21.	Trèves .	. ●PTRE
„ 22.	„ .	. STR∪
„ 23.	„ .	. STR
„ 24.	„ .	. STR

FL. IVL. HELENÆ AVG.

No. 25. Constantinople CONSE

FAVSTA N. F.

No. 26. Without mint-mark.

„ 27. Thessalonica . TSA

FLAV. MAX. FAVSTA AVG.

No. 28. Nicomedia . SMNB

„ 29. Trèves. With bust of Helena STR∪

PERCY H. WEBB.

XVII.

ANGLO-GALLIC COINS.

(Continued from p. 212.)

HENRY VI.

(See Plates XXII.-XXV.)

HENRY VI was nine months old on his accession to the English throne on September 1, 1422, and he was only a few weeks older when, on the death of Charles VI on October 22, 1422, he succeeded to the throne of France, by virtue of the agreement entered into on the marriage of Henry V and Catherine of France. He was proclaimed King of France at Paris, and the Dukes of Bedford and Gloucester were appointed Regents.

The Anglo-Gallic coinage of Henry VI is on a different footing from the previous coins of this series. Hitherto we have been dealing with French feudal coins, struck by English rulers by virtue of their possession of an earldom or duchy in France. We have seen how Henry II struck coins as Duke of Aquitaine and Earl of Poitou; even the Anglo-Gallic coins of Edward III, although he laid claim and actively asserted his claim to the throne of France and styled himself King of France on his coins, can only be considered as feudal coins struck for Aquitaine or Ponthieu. The coins of Henry V are, perhaps, more in the nature of regal coins, as they follow the types of the regal coins of Charles VI, but they were only issued from the local

mints of Normandy, and, at any rate after the Treaty of Troyes, are not, properly speaking, regal coins. The coins of Henry VI, on the other hand, are French regal coins. He was *de facto* King of France, and these coins were struck by him as King of France in the French regal mints, as well as in the mints of Normandy.

At the date of his accession to the French throne, he was acknowledged as King of France by the northern and eastern parts of the country. The parts south of the Loire for the most part acknowledged the claim of the Dauphin.

The Regent, the Duke of Bedford, was bent on maintaining the English supremacy in France, and he strengthened his position by marrying the sister of the Duke of Burgundy.

For the first few years of Henry's reign, the English succeeded in holding their own. They began, however, to lose ground in 1429, when the French, headed by Joan of Arc, captured Orleans. This was followed up by other French successes, and in July Charles the Dauphin was crowned King at Reims. In May, 1430, Joan of Arc fell into the hands of the Duke of Burgundy's soldiers, who handed her over to the English, and in the following year she was burnt at the stake as a heretic. This, however, did not help the English cause, as the French, encouraged by her example, continued to press on, and by 1434 little more than Paris and Normandy were left.

In 1435 Bedford died, and shortly afterwards the Duke of Burgundy renounced his alliance with the English and joined the Dauphin. He concluded with him the treaty of Arras, by which Charles ceded to him the towns of the Somme, with the profits of the mints of Amiens and St. Quentin.

In 1436 Paris fell, and Calais was besieged by the Duke of Burgundy. England, however, made an effort and drove off the army investing Calais, and recovered several places in Normandy.

The English managed to hold what they had gained for a few more years, but in 1442 they lost the whole of Guienne and Gascony, with the exception of Bordeaux and Bayonne. In 1444 a truce was arranged, which was strengthened by the marriage of Henry to Margaret of Anjou in 1445. In 1449, however, the war was renewed, and in 1450 Rouen fell and the whole of Normandy was lost. In 1451 the French attacked Bordeaux and Bayonne, which, in the absence of help from England, were forced to capitulate. Thus the whole of the English possessions in France, with the sole exception of Calais, passed into the hands of the French, and the history of the Anglo-Gallic coinage practically reaches its close.

The coins of Henry VI consist of a salute and an angelot in gold; a grand blanc and petit blanc in silver; a tresin, denier tournois, denier parisis, and maille tournois in billon.

On the death of Charles VI on October 22, 1422, the masters of the mint applied to the Council to know whether they were to cease striking coins, and were told that they were to continue to strike coins as heretofore.¹

A new coinage was ordered² to be prepared on November 2, 1422, with the name and arms of Henry, and on the 23rd of the same month a Royal Ordinance³ appeared, providing for the issue of the grand blanc.

¹ *Registre de la bibl. de la Sorbonne*, H. 1, 9, No. 174, 132 v°.

² *Bibl. Nationale*, ms. fr. 5524, f° 123, r° et v°.

³ *Archives Nationales*, registre Z 1^a, 58, f° 172 r°.

This ordinance states that there were at that date no silver coins current of greater value than two deniers tournois, and it had therefore been decided to coin blancs deniers, current for 10 deniers tournois, at the rate of 6 sols 3 deniers (75 pieces) to the mark, giving a weight of 54.17 grains. The type was to be, on the obverse two shields with the arms of France and England with Henricus above, and on the reverse a cross with Henricus below.

Another manuscript⁴ also alludes to this issue of grands blancs, and adds also particulars of an issue of petits blancs, current for 5 deniers tournois, at the rate of 150 pieces to the mark, giving a weight of 27.08 grains.

On January 28, 1423,⁵ a Royal Ordinance⁶ was issued giving currency in Normandy to the denier blanc, double tournois, petit denier tournois, and maille tournois "recently struck."

On February 6, 1423, the gold salute was ordered to be struck.⁷ It was to be at the rate of 63 to the mark, giving a weight of 64.5 grains, and current for 25 sols. It was to bear the arms of France and of England, and to have a hand in place of the sun over the scroll of the "Ave Maria."

On June 4, 1423, a Royal Ordinance was issued providing for a complete coinage of salutes, grands blancs, petits blancs, tresins, deniers tournois, and mailles tournois.⁸ The provisions for the salute and the grand

⁴ *Bibl. Nat.*, ms. fr. 5524, 124 r^o.

⁵ Throughout this article the date is given according to the New Style.

⁶ *Arch. Nat.*, reg. Z 1^{er}, 58, f^o 172 v^o et 173 r^o.

⁷ *Ibid.*, reg. Z 1^{er}, 58, f^o 173 v^o, registre entre 2 ais.

⁸ *Ibid.*, reg. Z 1^{er}, 58, 175 r^o et v^o.

blanc merely repeat the provisions contained in the former ordinances. The petit blanc was to be current for 5 deniers tournois, and to be struck at the rate of 12 sols 6 deniers (150 pieces) to the mark, giving a weight of 27·08 grains. The tresin, current for 3 deniers tournois, was to be struck at the same rate as the petit blanc; the petit denier tournois, current for one denier tournois, at the rate of 18 sols 9 deniers (225 pieces) to the mark (weight 18·08 grains); and the petite maille tournois, current for one maille tournois, at the rate of 25 sols (300 pieces) to the mark (weight 13·54 grains).

These coins are stated to have been struck from June 4, 1423, to April 13, 1436.⁹

Another manuscript¹⁰ also alludes to the coinage of the petit blanc, tresin, denier tournois, and maille tournois, and is accompanied by illustrations. The illustrations do not, however, agree with the known types of Henry VI's coins. For the petit blanc, an illustration is given of the tresin, with the legend *FRANCORVM · ET · ANGLIÆ ·* instead of *TVRONVS · TRIPLÆX · FRANÇ.*



FIG. 1.—Petit blanc.

⁹ Reg. entre deux ais, 88 r^o.

¹⁰ *Bibl. Nat.*, 5524, 125 r^o à 126 v^o.

For the tresin, an illustration is given of the ordinary double tournois of Henry V.



FIG. 2.—Tresin.

For the denier tournois and maille tournois, illustrations are given of coins resembling those of Henry V, with h in centre of the cross on the reverse, and the initial only of the king's name in the legend on the obverse. The types are as follows:—



FIG. 3.—Denier tournois.

Denier tournois.

Obv.—✠ h · REX · FR̄ANCIA · ET · ANGL. Leopard passant to l., fleur-de-lis above.

Rev.—✠ TVRONVS · CIVIS. Cross with h in centre.



FIG. 4.—Maille tournois.

Maille tournois.

Obv.—✠ h · FRANQ · ET · ANGL · REX. Fleur-de-lis and leopard passant to l.

Rev.—✠ OBOLVS · CIVIS ;. Cross with h in centre.

On September 6, 1423, a new issue of salutes was ordered to be struck.¹¹ The new salute was to be current for 22 sols 6 deniers instead of 25 sols, and was to be struck at the rate of 70 pieces to the mark instead of 63, giving a weight of 58·04 grains instead of 61·5 grains. It was to bear the arms of France and England as on the former salutes, but a sun was to take the place of the hand above the scroll of the Ave Maria.¹²

On December 17, 1423, certain marks were ordered to be placed on the coins,¹³ so that, if any gold or silver coins should be found of insufficient weight or fineness, it would be known under what master of the mint they were struck. On the salutes, the M of IMPERAT was to be formed thus: M instead of m as heretofore; on the grands blancs and the petits blancs the three small pellets between each word on the reverse were to be placed thus: ‡

A manuscript states that on March 1, 1424, were struck francs à cheval of fine gold, at the rate of 80 to

¹¹ *Arch. Nat.*, reg. Z 1^B, 58, 177 r^o.

¹² *Registre entre 2 ais*, 159 v^o.

¹³ *Ms. fr.* 5524, 126 r^o.

the mark, current for 20 sols. The following illustration (Fig. 5) accompanies the manuscript :—

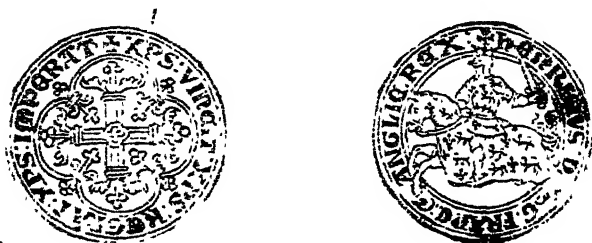


FIG. 5.—Franc à cheval.

This is the only mention found of the franc à cheval, and it is doubtful if it were ever struck.

On May 31, 1424, an issue was ordered of deniers parisis. Letters patent¹⁴ were addressed to the masters of the mints, stating that the issue of deniers and mailles tournois had been ordered, and adding, "It has come to our notice that there is need of a coinage of petits deniers parisis in our town of Paris." The letters patent provide for the issue of petits deniers parisis noirs, current for one denier parisis, and at the rate of 180 to the mark, giving a weight of 21 grains.

Another manuscript¹⁵ alludes to the issue, and is accompanied by the following illustration (Fig. 6) :—



FIG. 6.—Denier parisis.

¹⁴ Sorb. H., 1, 9, n^o 174, 197 r^o.

¹⁵ Ms. fr. 5524, 126 r^o et v^o.

There is an ordinance¹⁶ set out in the *Archives Nationales*, which follows almost exactly the wording of the letters patent recorded in the *Archives de la Sorbonne* providing for the issue of deniers parisis, but it gives the date of issue as May 31, 1423. I think that both ordinances must allude to the same issue of deniers parisis, and that the later date is the correct one, as the earliest issue by Henry VI of deniers tournois and mailles tournois, of which we have a record, is the issue of June 4, 1423. The wording of the letters patent seem to imply that the deniers tournois and mailles tournois had been in use for some little time, and were insufficient for the need of Paris, which wanted a denier parisis as well. If this issue of deniers parisis had been made on May 31, 1423, it would imply a previous issue of deniers tournois and maille tournois of which there is no record, which seems unlikely.

Another issue of deniers parisis was ordered on November 12, 1426,¹⁷ and was actually made on December 30, 1426.¹⁸ They were of the same weight and alloy as the previous issue, but the type is altered.



FIG. 7.—Denier parisis.

¹⁶ *Arch. Nat.*, reg. Z 1^a, 58, 181 r^o.

¹⁷ *Ms. fr.* 5524, 128 r^o.

¹⁸ *Arch. Nat.*, reg. en papier du carton Z 1^a, 914; *ibid.*, reg. Z 1^a, 60, 12 v^o.

The *Manuscrit Français 5524*¹⁹ states that on October 22, 1425, there were struck at the Mint of Rouen salutes of gold, of 23½ karats, at the rate of 63 pieces to the mark (weight 645 grains), current for 25 sols tournois. The manuscript gives the following illustration (Fig. 8):—

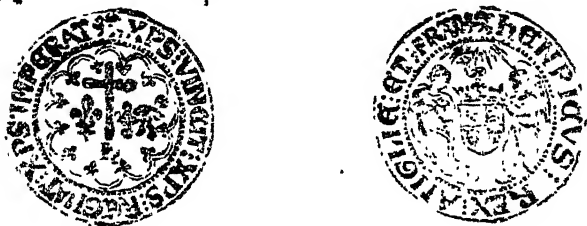


FIG. 8.—Salute.

This entry seems to be a mistake of the chronicler. It will be seen that the obverse type is similar to the salute of Henry V, but the legend shows that it is not his, and the leopard mint-mark occurs. The reverse type is the usual type of Henry VI's salutes. It will be remembered that the ordinance of September 6, 1423, provided for the issue of salutes, and those of Rouen of that issue are quite common.

On November 20, 1426, a list of authorized coins was sent to the Provost of Paris.²⁰ They were as follows: Salute, noble, half-noble, quarter-noble, grand blanc, petit blanc, denier parisis, and denier tournois. It is added that the double should be current at the rate of three to a petit blanc.

On January 1, 1427, the currency of écus and

¹⁹ Ms. fr. 5524, 126 vº.

²⁰ *Arch. Nat.*, reg. Z 1^B, 60, 13 rº à 14 vº.

moutons and all other gold coins, except the salute and the noble, was forbidden.²¹

On May 24, 1427, a new gold coin, the angelot, was issued.²² The order provides for the issue of petits deniers of fine gold, called angelots, which should be current at the rate of three for two of the salutes then struck in the coinage of France; they were to be struck at the rate of 105 to the mark, giving a weight of 38.6 grains. The issue was to be made without delay.

On June 22, 1435, Charles VII issued an order²³ that the blancs bearing the arms of France and England, theretofore current for 8 deniers parisis, should be current for 6 deniers parisis.

The Manuscrit Français 5524 states²⁴ that on July 21, 1435, were struck by order of the king, angelots current for 32 sols 6 deniers tournois, at the rate of 48 to the mark, giving a weight of 84.66 grains. It illustrates the coin (Fig. 9), which it will be noticed is of the same type as the ordinary angelot, with the addition of the *h* below the cross on the reverse, and bears the mint-mark of Rouen. It seems doubtful whether this issue ever took place.

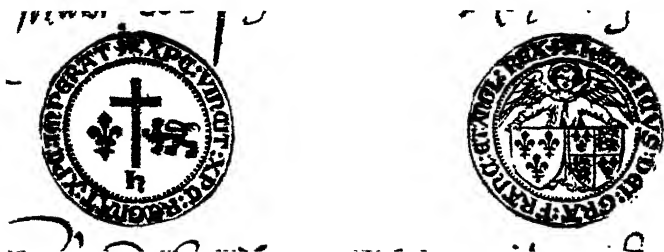


FIG. 9.—Angelot of July 21, 1435.

²¹ Sorb. H., 1, 11, 166^h, petit cahier inséré dans la registre.

²² Arch. Nat., reg. Z 1^a, 60, 15 r^o et v^o.

²³ *Ibid.*, 3.

²⁴ Ms. fr. 5524, 129.

On April 13, 1436, Paris was retaken by Charles VII. The manuscript in the Bibliothèque Nationale²⁵ is worth quoting fully.

“Inasmuch as on Friday, the 3rd April after Easter, in the year 1437²⁶ the town of Paris, by God’s help, was retaken by Our Sovereign Lord, the King of France, Charles, seventh of that name, there will be no more mention made in this work of the said Henry, King of England, as regards Paris, but only for the countries of Guienne, Picardy and Normandy, inasmuch as from henceforth the power of the said English commenced to decline daily and on the other hand the French commenced to retake the towns places and fortresses, where the said King of England and his predecessors had encroached on the crown of France; also the said Henry, King of England, continued the coinage of his moneys in the countries which he occupied in France, of the weight, type, value and fineness, and in the type and manner aforesaid, until the month of December 1453, when, by the gift of God, the said Henry, King of England, and Catherine and the English, who had long occupied part of the said realm of France, were, in warlike and victorious fashion, expelled therefrom.”

One can sympathize with the author of this manuscript who in his account of the French coinage had so long been compelled to record the issue of coins by a usurping prince, and his joy in recording that no longer would the pages of his work be sullied by the name of Henry.

The same manuscript²⁷ states that on September

²⁵ Ms. fr. 5524, 132 r^o et v^o.

²⁶ This is a clerical error. April 13, 1436, is the correct date.

²⁷ Ms. fr. 5524, 132 v^o et 133 r^o.

10, 1453, currency was given for Guienne to the following coins, struck at Bordeaux in the name of Henry, King of England, and in other places in Guienne, and also in England by command of the Captain Talbot (afterwards Earl of Shrewsbury) of England, then Lieutenant-General of Henry in Guienne, who had then retaken the town of Bordeaux and many fortresses in Guienne:—

Talbots, of 23 karats, struck in Guienne, of 2 deniers 18 grains weight each piece, for 21 sols 8 deniers tournois (Fig. 10).

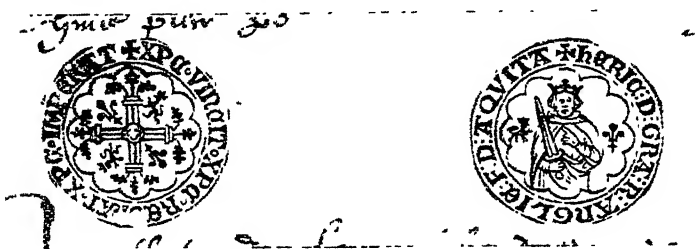


FIG. 10.—Talbot.

Angelots of gold struck in London of $23\frac{3}{4}$ karats of 3 deniers weight, for 32 sols 6 deniers tournois (Fig. 11).

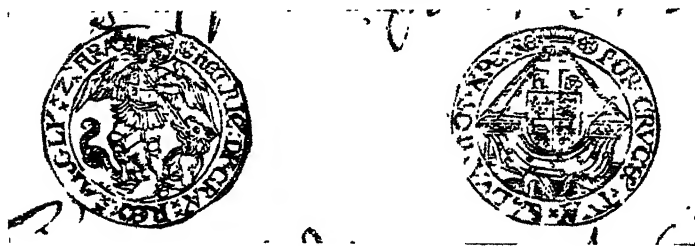


FIG. 11.—Angel.

Petits hardis, old and new, of the Prince of Wales, of King Edward, and of King Henry of England, father

of the said King, of 22 grains weight, each piece for 4 deniers tournois (Fig. 12).



FIG. 12.—Petit hardi.

It will be noticed that the talbot is the same type as the hardi d'or, and the petit hardi is the same type as the hardi d'argent, described under Henry IV, the only difference being in the ornaments on either side of the king on the obverse, and the legend on the reverse, of the talbot. It may be that the coins described under Henry IV should be attributed, the hardi d'or to Henry VI and the hardis d'argent, or some of them at any rate, to Henry V, "the father of the said King."

The angel is of the same type as the English angel of Henry VII.

The author of the manuscript adds a final note of triumph. "Inasmuch as, by the grace of God, in the month of December, about Christmas time, the English were entirely victoriously expelled from the realm of France, and their possessions completely reduced to the obedience of the crown of France, except the town of Calais alone, there will be no more mention in this work of the ordinances, statutes and edicts of Henry, King of England, his governors and lieutenants, generals and others, who at that time retreated in their confusion to Calais and England."

I have now set out the principal manuscripts dealing

with the coins of Henry VI, but there are several other manuscripts dealing with details, which now claim attention.

The chief of these relate to the mint-marks of the various towns which struck coins for Henry.

On December 12, 1422, the following mint-marks ("differances") were decided on for the grand blanc²⁸ :—

Paris. A crown, in the place of the customary small cross.

Tournai. A small tower.

Arras. A lozenge.

St. Quentin. A rowel or mullet.

Chalons. A crescent.

Troyes. A rose.

Macon. A trefoil.

Nevers. A star.

Auxerre. A mill-rind (*fer de moulin*).

Dijon. A little sun.

Tournai never recognized Henry, and consequently no mint was established by him there. On the contrary, Charles himself established a mint at Tournai, where he struck salutes in the year 1433.²⁹ It is interesting to note that in the ordinances of Charles VII there is no mention made of an issue of salutes, but he struck salutes both at Tournai and at Beauvais. The former town was situated in the middle of, and the latter close to, the country occupied by Henry, and it is easy to understand that it was necessary for Charles VII to strike coins there of a type and value to which the inhabitants of those towns would be accustomed. Between 1422 and 1435 Charles VII struck at Tournai a number

²⁸ *Arch. Nat.*, registre dit : entre 2 ais f^o 159 r^o.

²⁹ *Rev. num. fr.*, 1907, p. 515.

of coins differing from those struck by him in his other mints.

Another manuscript³⁰ gives a fuller list of mint-marks.

Paris. The crown.

Rouen. The leopard.

St. Lô. The fleur-de-lis.

Arras. A trefoil. (This is the mint-mark of Maçon.)

Amiens. A lamb

Troyes. A rosette.

Chalons. A crescent.

Tournai. A tower.

Nevers. A star.

Auxerre. A mill-rind.

Le Mans. A root.

Dijon. A Veronica. (This is the correct mint-mark of Dijon.)

The ordinance of February 6, 1423, which provides for the first issue of salutes, also provides that the following mint-marks should be placed at the beginning of the legends, both on the obverse and reverse :—

Paris. A crown.

Rouen. A leopard.

Auxerre. A mill-rind.

Le Mans. A root.

St. Lô. A fleur-de-lis.

Amiens. A lamb.

Dijon. A Veronica.

And in other places where Henry struck salutes, a crescent.

On December 11, 1422, the general masters of the Mints decided to place in the trial boxes (boîtes) one denier d'or for every 200 pieces struck, and one denier of the silver or billon coinages for 60 sols, that is, for every 720 pieces struck.³¹

³⁰ Ms. fr. 5920.

³¹ *Arch. Nat.*, reg. Z 1^r, 58.

On November 13, 1423, an order³² of the king was delivered to one Casin du Pié to open a mint at Amiens.

The order of December 17, 1423, which provided for special form of M on the salutes and the stops on the grand blanc and petit blanc, also provided for the following mint-marks on the petites mailles tournois:—

Rouen. A pellet under the C of HENRICVS and of CIVIS.
St. Lô. A pellet under the S of HENRICVS and of CIVIS.

On February 19, 1424, an order³³ was sent to the master of the mint then newly established at Amiens, that he should place on the salutes, grands blancs, and other silver coins a little lamb, after the fashion of an Agnus Dei.

Another interesting manuscript concerning the mint of Amiens has recently been published by M. Louis Caillet.³⁴ It is a report of Jean de Vaultx, master of the mint at Amiens, concerning his expenses for thirty-six days during 1436.

It will be recollected that by the treaty of Arras, entered into between the Dauphin Charles and the Duke of Burgundy, Charles had ceded to the duke the profits of the mints of Amiens and St. Quentin (see p. 362). The question raised by this document is whether Jean de Vaultx was responsible to Charles or to the duke, and does not concern us, but the document states that the journeys of Jean de Vaultx were undertaken on account of the trial boxes of the Amiens mint. These trial boxes were three in number, two containing about 320 salutes d'or and the third 33 grands blancs. These

³² *Arch. Nat.*, reg. Z 1^b, 3, 17 v^o.

³³ *Registre entre 2 ais*, 160 r^o.

³⁴ *Rev. num.*, 1909, p. 502.

must be the coins of Henry VI struck at Amiens, and represent issues of 64,000 salutes and 23,760 grands blancs.

On October 22, 1425, a Royal Ordinance³⁵ was issued to open again a mint at Le Mans. It is worded as follows:—

“Whereas the town of Le Mans has lately been retaken and placed under our sway, by the advice of our well beloved uncle John, Regent of our Realm of France, Duke of Bedford, we wish and ordain that there shall be made and built anew, in the said town of Le Mans, a mint at which shall be struck and coined such and similar coins of gold and silver as are coined in our other mints.”

Dies were subsequently sent for the coinage of salutes, grands blancs, petits blancs, and petits deniers tournois, and an order issued³⁶ to place a mint-mark of a root on the salutes, grands blancs, and other silver moneys.

On July 24, 1428, the master of the mint at Le Mans applied to be discharged on the ground that, on the entry of the enemy into the town of Le Mans, he had been robbed and had nothing with which to issue the coinage. He offered to hand over the plant for the coinage, if he was paid for it.³⁷

Some of the manuscripts deal with the regulation of the currency. On January 27, 1423, an ordinance³⁸ was issued, addressed to the Provost of Paris, stating that Charles VI had struck salutes of 25 sols tournois, doubles tournois, and petits deniers tournois, and that it had

³⁵ *Arch. Nat.*, reg. Z 1^a, 60, 3 v^o.

³⁶ *Registre entre 2 ais*, 80 r^o.

³⁷ *Arch. Nat.*, reg. Z 1^a, 3, 117 v^o.

³⁸ *Ibid.*, reg. Z 1^a, 58, 173 r^o et v^o.

come to the notice of the Council that "Charles, our adversary" was striking, in the mints of the towns obedient to him, deniers of gold called écus and moutons, of inferior fineness, and doubles deniers tournois, false and bad, which were not of the value, nor even half the value, of those of Charles VI recently struck, all which coins he had made of similar type and fashion to the écus, moutons, and doubles deniers tournois at that date current in the realm of France. It was therefore absolutely forbidden to take or pass at any price whatever any of the said coins, whether of gold or of silver, struck in the towns not obedient to Henry, but in the hands of his adversary Charles, on pain of forfeiture, etc.

It will be recollected that Henry had ordered an issue of salutes, current for 25 sols, on February 6, 1423. It was found, however, that traders preferred the old écu to the salute, which they would only accept at the price of an écu. A Royal Ordinance³⁹ was therefore issued on March 5, 1423, fixing the price of the salute at 25 sols, the mouton at 15 sols, and the écu at 22 sols 6 deniers, that is, 9 salutes for 10 écus, and 3 moutons for 2 écus.

On June 22, 1423, letters patent⁴⁰ were addressed to the Provost of Paris, fixing the currency of certain coins as follows:—

The salute, for 25 sols tournois.

The salute, struck in Normandy by Henry V, bearing the arms of England only, for 25 sols tournois.

The English noble, for 45 sols tournois.

³⁹ *Arch. Nat.*, reg. Z 1^s, 58, 174 r^o et 175 r^o.

⁴⁰ *Ibid.*, reg. Z 1^s, 58, 179 r^o à 180 r^o.

The half-noble and quarter-noble, for 22 sols 6 deniers tournois, and 11 sols 3 deniers tournois respectively.

The grand blanc, with the arms of France and England, for 10 deniers tournois.

The petit blanc, with the same arms, for 5 deniers tournois.

The petit denier noir, called tresin, similarly made with the same arms, for 3 deniers tournois.

The petit deniers tournois and petite maille tournois, lately ordered to be struck, for one denier tournois and one maille tournois respectively.

The double denier tournois and petit denier tournois, not long since ordered to be struck by Charles VI in the mints in Normandy, as follows—the double for two deniers tournois and the petit denier called noîrez for one maille tournois.

All the écus, old and new, and moutons struck in time past at the said mints and at other mints “both of our coins and of others,” were not to be taken except for bullion, under pain of forfeiture, etc.

On September 6, 1423, letters patent⁴¹ were addressed to the Provost of Paris, stating that “the enemy and adversary of Us and Our Realm, who meddles with carrying our Arms of France, has exerted and does exert himself each day to strike doubles deniers of two deniers tournois, bearing our said Arms of France, of less weight and alloy than those struck by our grandfather, King Charles, whereby we and the whole of the Realm of France have been greatly deceived and damaged, and may be still more so, if we take no steps to remedy it, and wishing to obviate the frauds and deceptions of our said enemy and adversary, and for the good of our people, to prevent them being defrauded and deceived by taking the said doubles deniers for a higher value than they have, and seeing that those which our

⁴¹ *Arch. Nat.*, reg. Z 1^B, 58, 177 v^o et 178 r^o.

said grandfather and also our father struck, in France and in Normandy, are of good weight and alloy, we ordain that 12 of the said deniers doubles struck in our coinage of France and of Normandy which are current for 2 deniers tournois each shall be current as follows: Six doubles for the grand blanc of 10 deniers tournois now struck by us with the arms of France and England, and three for the petit blanc with the same arms, and for no more. The salutes of gold newly struck, with the arms of France and England, at the rate of 70 to the mark, for 22 sols 6 deniers tournois, in blancs of two blancs of 10 deniers tournois and petits blancs of 5 deniers tournois, and for 27 sols in doubles both of France and Normandy. And moreover since in our good town of Paris the people are accustomed to deal in parisis we order that the deniers noirs which we have lately struck, to which we have given currency at 3 deniers tournois, should be taken in future for 2 parisis and no more."

The double tournois which is ordered to be current at the rate of six for the grand blanc had previously been current at the rate of five for the grand blanc.

There are also numerous manuscripts relating to the issues of different coins at different mints, setting out the numbers struck, the appointments of gardes, contregardes, maîtres particuliers, tailleurs, and essayeurs. The particulars of the various issues will be given under the descriptions of the coins in question. For particulars of the officers of the mints and the text of the manuscripts recording their appointments, I would refer the reader to De Saulcy's book, where these will be found fully set out. I will only add that the ordinances relating to the Dijon Mint are in the name of the

Duke of Burgundy, the remainder in the name of Henry VI.

We will now pass on to the description of the coins struck by Henry VI.

GOLD COINAGE.

Salute.

There are two issues of this coin. The first issue was struck in accordance with the order of February 6, 1423, and weighs 64·5 grains (63 to the mark). It was current for 25 sols tournois. The second issue was struck in accordance with the order of September 6, 1423, and weighs 58·04 grains (70 to the mark). It was current for 22 sols 6 deniers tournois. The salute of the second issue differs in type from the salute of the first issue, in having a sun over the scroll of the "Ave Maria" instead of a hand.

First Issue. February 6, 1423.

No salutes of this issue are known at present, but no doubt they were struck. The records show that the master of the mint at Paris received orders to strike this salute on February 7, 1423⁴²; on March 12, 1423, the Royal Ordinance for this issue was sent to Dijon⁴³; on May 8, 1423, two pairs of dies of these salutes for Rouen were delivered, and one pair for St. Lô⁴⁴; on June 17, 1423, the returns made by the master of the mint at St. Quentin show that he had struck these salutes.⁴⁵ It would seem, therefore, that the salute of this issue was

⁴² Sorbonne, reg. H. 1, 9, n^o 174, f^o 5 r^o.

⁴⁴ *Arch. Nat.*, reg. Z, 1^{er}, 8, 10r^o.

⁴³ *Ibid.*, f^o 193 r^o.

⁴⁵ *Ibid.*, 11 v^o.

struck at any rate at Paris, Dijon, Rouen, St. Lô, and St. Quentin, though no specimens have at present come to light.

Second Issue. September 6, 1423.

Paris.

On October 4, 1423, Pierre de Landes was appointed master of the mint.⁴⁶

On December 14, 1423, Arnoullet Rame was appointed master of the mint, and on the 17th of the same month he was ordered to place an M in the place of the \mathfrak{m} in IMPERAT (see p. 367).

On April 14, 1426, Guiot de Hannin was ordered to place a pellet under the T of REGNAT for the period during which Regnault Tumery was master of the mint.⁴⁷

On January 18, 1435, Andriet Marcel was ordered to place an annulet under the π of IMPERAT and under the α of REX, on the beaded inner circle (le guy parmi, c'est à dire à cheval sur le grenëtis).⁴⁸

On February 19, 1435, Gaulchier Vivien was ordered to place the same special mark on his salutes as that ordered for Andriet Marcel. This probably means that no salutes were struck in the preceding month by Andriet Marcel, and his mint-mark was therefore adopted for his successor.

1. *Obv.*—m.m. crown. hENRICVS : DOM : GRA :
FRANCORU : \mathfrak{X} : ANGLIA : REX. Stops, pellets.
Two shields side by side, that on the l. bearing
the arms of France, that on the r. the
arms of England. Behind the shields, the

⁴⁶ *Arch. Nat.*, reg. Z 1^{er}, 3, 14 r^o.

⁴⁷ *Ibid.*, 64 v^o.

⁴⁸ *Registre entre 2 ais*, 147 r^o.

Virgin Mary on the l., her head surrounded by a nimbus, and the Angel Gabriel on the r. Between them the word ΠΥΘ, written upwards, on a scroll, surmounted by sun's rays.

Rev.—m.m. crown. ΧΡΩ * ΒΙΝΩΙΤ * ΧΡΩ * ΡΑΘΗΛΤ * ΧΡΩ * ΙΜΡΕΡΛΤ. Stops, star of five points. Plain cross, h below; fleur-de-lis to l., leopard passant to r. The whole within a tressure of ten arches with fleurs-de-lis at the angles.

Wt. 53.5 grs. [Pl. XXII. 1.]

My Collection.

The form of the *η* in ΙΜΡΕΡΛΤ shows that this coin was struck before December 17, 1423. It is, therefore, probably the salute of Pierre de Landes, struck from October 4 to December 14, 1423.

2. *Obv.*—As No. 1, but the Virgin has a double nimbus, and ΠΥΘ is written downwards.

Rev.—As No. 1, but ΙΜΡΕΡΛΤ.

Wt. 51.5 grs. De Saulcy Collection.

This is probably the salute of Arnoullet Rame, struck after December 17, 1423.

3. Same type as No. 2. Annulet under the α of ΡΑΧ and π of ΙΜΡΕΡΛΤ.

Thomas Brookes Collection (Sotheby, 1904), Lot 4.

This is the salute of Gaulchier Vivien, struck after February 19, 1435.

4. *Obv.*—m.m. crown; annulet below. ΗΩΙΗΙΩVS (*sic*): ΔΘΙ: ΓΡΑ: ΦΡΑΩΟΡV: Ζ: ΑΘΛΙΩ: ΡΩΧ (*sic*). Type as before. Virgin has single nimbus; ΠΥΘ written upwards.

Rev.—m.m. crown; annulet below. XPC ꝛ VIIIQIT ꝛ
XPC ꝛ RAGIIAT ꝛ XPC ꝛ IIIPARAT. Stops,
pellet and star. Usual type.

Wt. 53 grs. [Pl. XXII. 2.]

British Museum.

5. *Obv.*—m.m. crown; annulet below. HARRIVS : DEI :
GRA : FRACORV : Z : AGLA : RAX. Type as
before. The Virgin has single nimbus. AVA
written upwards.

Rev.—m.m. crown; annulet below. XPC : VIHQIT :
XPC : RAGIIAT : XPC : IIIPARAT. Stops,
pellets. Type as before.

Walters Collection.

6. *Obv.*—m.m. crown; annulet below. HARRIVS DEI :
GRA' . FRACORV : Z AGLA : RAX. Type
as before. The Virgin has no nimbus visible.

Rev.—m.m. crown; annulet below. XPC' . VIHQIT :
XPC' . RAGIIAT : XPC' . IIIPARAT. Type as
before.

Walters Collection.

Amiens.

The mint here was established on November 13, 1423, and the mint-mark of an Agnus Dei ordered on February 19, 1424 (see p. 377). From August 2, 1426, to November 17, 1435, 207,400 salutes were struck by various masters of the mint.⁴⁹

1. *Obv.*—m.m. Agnus Dei. HARRIVS ꝛ DEI ꝛ GRA ꝛ
FRACORV ꝛ Z ꝛ AGLA ꝛ RAX. Stops, sal-
tires. Type as before. Virgin with single
nimbus; AVA written upwards.

⁴⁹ *Arch. Nat.*, reg. 188, du carton Z, 1^a, 815.

Rev.—m.m. Agnus Dei. ΧΡΑ · VINCIT · ΧΡΑ ·
 ΡΑΘΗΑΤ · ΧΡΑ · ΙΜΡΑΤ. Stops, rosettes.
 Type as before.

Wt. 53·0 grs. [Pl. XXII. 3.]
 British Museum.

2. *Obv.*—m.m. Agnus Dei. ΗΑΗΡΙΩVS × ΔΑΙ × ΓΡΑ ×
 ΡΑΘΩΡ'Ω × Ζ × ΑΓΛΙΑ × ΡΑΧ. Stops, sal-
 tires. Type as No. 1.

Rev.—m.m. Agnus Dei. ΧΡΑ · VINCIT · ΧΡΑ ·
 ΡΑΘΗΑΤ · ΧΡΑ · ΙΜΡΑΤ. Stops, rosettes.
 Type as No. 1.

Wt. 53·1 grs. De Saulcy Collection.

3. As No. 2, but reading ΗΑΡΙΩVS on obverse.

Wt. 53·6 grs. British Museum.

4. As No. 1, but annulet under the last letter but one
 of the legends.

Wt. 53 grs. British Museum.

The salutes without a secret mark are probably the
 earlier issues.

Auxerre.

On May 28, 1428, two sets of dies for the salute were
 sent to Thevenin Boursier, master of the mint at Auxerre,
 and were acknowledged on June 12, 1428.⁵⁰

Obv.—m.m. mill-rind (fer de moulin). ΗΑΗΡΙΩVS :
 ΔΑΙ : ΓΡΑ : ΡΑΘΩRV : Ξ : ΑΓΛΙΑ : ΡΑΧ.
 Usual type. ΑVΑ written upwards.

Rev.—m.m. mill-rind. ΧΡΑ' * VINCIT * ΧΡΑ' *
 ΡΑΘΗΑΤ * ΧΡΑ' * ΙΜΡΑΤ. Usual type.

Wt. 51·5 grs. De Saulcy Collection.

⁵⁰ *Arch. Nat.*, reg. Z 1³, 3, 113 v^o.

Chalons-sur-Marne.

On September 9, 1427, there were sent to Jehan Brisset two "piles" and four "trousseaux" to strike salutes.⁵¹

Obv.—m.m. crescent. HENRICVS : DEI : GRA :
FRANCORV : X : AGLIA : REX. Usual type.
Virgin with double nimbus; AVA written
upwards.

Rev.—m.m. crescent. XPC' * VINQIT * XPC' *
REGNAT * XPC' * IMPERAT. Usual type.

Wt. 53·8 grs. [Pl. XXII. 4.]

British Museum.

The ordinance of February 6, 1423, which provided for the first issue of salutes, also provided for certain mint-marks on the salutes struck at Paris, Rouen, Auxerre, Le Mans, St. Lô, Amiens, and Dijon; and adds, "and in other places where Henry struck salutes, a crescent." This salute, however, belongs to the second issue, and I think that we may assume that by that time the crescent had been allocated to Chalons alone, as on the silver coins, as we have a salute of Troyes with the mint-mark rose, and it should have a mint-mark crescent if the mint-marks under the order of February 6, 1423, were still in force.

Le Mans.

The mint at Le Mans was reopened on October 22, 1425 (see p. 378), and two sets of dies for the salute were sent from Paris on the 27th of that month.⁵²

On July 17, 1432, it was decided to place a pellet

⁵¹ *Arch. Nat.*, reg. Z 1^B, 3, 94 r^o.

⁵² *Ibid.*, 165 r^o.

special mark is an annulet enclosing pellet under the last letter but one of the legends.

The whole of this information as to the coinage of salutes at Rouen is contained in a register⁵⁴ preserved in the *Archives Nationales* intitled "Ouverture des boistes de la monnoir de Rouen, du temps des Anglois."

It will be noticed that no issue of salutes is mentioned before 1433, but it is probable that salutes were issued before that date. The "boîte" which was opened probably only contained coins struck since Etienne Marcel was appointed to the mint, and the manuscript does not prove that there was no previous issue.

Salutes occur with the special mark of a pellet below the last letter of the legends. This may be the special mark of some moneyer before Etienne Marcel, or possibly of Guillaume le Monnier from January 23, 1445, to October 21, 1445. The manuscript makes no mention of his special mark, but it will be noticed that he struck over 80,000 salutes during that period.

It is interesting to note that the commonest type of Rouen salutes is that bearing Etienne Marcel's special mark, and that he struck more than double as many salutes as his successors.

1. *Obv.*—m.m. leopard. HENRIQVS : DEI : GRA :
FRANCORV : Z : AGLIA : REX. Stops, pellets.
Type as before; the Virgin has a double
nimbus and AVA is written downwards.

Rev.—m.m. leopard. XPC' * VIQIT * XPC' *
REGNAT * XPC' * IMPERAT. Stops, stars.
Type as before.

Wt. 51 grs.

British Museum.

⁵⁴ *Arch. Nat.*, reg. Z 1383, du carton Z 1^b, 963-967.

This salute has no secret mark, and is therefore probably the earliest struck, before Etienne Marcel's appointment.

2. As No. 1, but annulet enclosing pellet below the last letter of the legends.

Wt. 53.1 grs. [Pl. XXII. 6.]

My Collection.

(From the Montagu and Kesteven Collections.)

3. As No. 2, but the annulet enclosing pellet is placed within, instead of upon, the inner circle on reverse.

Wt. 53.8 grs.

British Museum.

These two salutes belong to Etienne Marcel's issue, from March 18, 1433, to October 1, 1444.

4. As No. 1, but pellet under the last letter of the legends.

Wt. 53 grs.

My Collection.

This is possibly the salute of Guillaume le Monnier, struck between January 23, 1445, and October 21, 1445.

I have not come across any specimens of the salutes of Jaquet de Bresmer (October 21, 1444–November 19, 1444), Guillaume le Monnier and Thomassin Erquanbout (October 30, 1445–October 20, 1446), or Pierre de Preaulx (December 10, 1446–December 9, 1447).

St. Lô.

1. *Obv.*—m.m. fleur-de-lis. HÆNRIQVS : DÆI : GRA : FRACORV : Z : AGLIÆ : RÆX. Usual type. Virgin with double nimbus. AVÆ written downwards.

Rev.—m.m. fleur-in-lis. XPQ * VINQIT * XPQ * RÆGHAT * XPQ * IMPERAT. Usual type.

Wt. 53 grs.

My Collection.

2. As No. 1, but XPQ' throughout on reverse.

Wt. 53·4 grs.

British Museum.

3. *Obv.*—m.m. fleur-de-lis. hĒHRIQVS : DĒI : GRĀ :
FRĀQORVM : Z : AGLIÆ : RĒX. Pellet
under last letter but one of the legend.

Rev.—As No. 1, but pellet under last letter but two
of the legend.

Wt. 53·1 grs.

My Collection.

4. As No. 3, but reading hĒRIQVS on obverse.

Wt. 53 grs. [Pl. XXII. 7.]

British Museum.

The last two coins are of much rougher workmanship
than No. 1.

5. *Obv.*—As No. 3, but secret mark annulet under I of
hĒHRIQVS.

Rev.—As No. 3, but secret mark annulet under first
I of VINQIT.

Wt. 54 grs.

De Saulcy Collection.

St. Quentin.

On June 17, 1423, Jaquotin du Pré took the mint at
St. Quentin and promises to strike salutes.⁵⁵

1. *Obv.*—m.m. mullet. hĒHRIQVS : DĒI : GRĀ :
FRĀQORV : Z : AGLIÆ : RĒX. Usual type.

Rev.—m.m. mullet. XPQ · VINQIT · XPQ · RĒGNIAT ·
XPQ · IMPĒRAT. Usual type.

W. Talbot Ready. Catalogue No. 1.

I have not seen this coin, and cannot guarantee the
accuracy of the legends.

⁵⁵ *Arch. Nat.*, reg. Z 1^B, 3, 11 v^o.

Troyes.

Obv.—m.m. rose. HENRICVS : DEI : GRA : FRANCORV :
 X : AGLIA : REX. Usual type. Virgin with
 single nimbus; AVA written upwards.

Rev.—m.m. rose. XPC * VINQIT * XPC * REGNAT *
 XPC * IMPERAT. Usual type.

Wt. 53.2 grs. [Pl. XXII. 8.]

My Collection.

Dijon.

The mint at Dijon is on a different footing to the mints already mentioned, as it was under the control of the Duke of Burgundy, and was not a royal mint. The patterns for the salute d'or, grand blanc, petit blanc, and petit denier were prepared by Jehan Dast, a goldsmith of Dijon, and were not sent from Paris.⁵⁶

On June 30, 1423, Philip of Burgundy addressed letters to the general master of his mints at Burgundy, providing for the issue of the salute d'or of the type issued by Henry on February 6, 1423, that is, the salute at the rate of 63 to the mark and current for 25 sols tournois. The original of this document is preserved among the *Archives de la Côte d'Or* (Monnaies, B. 11210).

No specimen of the salute of this issue, struck at Dijon, is known at present.

It will be noticed that this manuscript speaks of mints. The Duke of Burgundy had a mint at Auxonne as well as at Dijon, but no coins of the Auxonne mint are known, and there is no record of the mint-mark allocated to that mint.

On August 10, 1424, Philip of Burgundy addressed letters to Jehan de Plaine, general master of his mints,

⁵⁶ *Archives de Dijon*, reg. B 11215, fo 101 ro.

providing for the issue at Dijon of salutes d'or of the type issued by Henry on September 6, 1423, that is, the salute at the rate of 70 to the mark, and current for 22 sols 6 deniers tournois. This document appears only to allude to the mint at Dijon. The original is also preserved in the *Archives de la Côte d'Or*.

From March 6, 1425, to March 13, 1436, 149,000 salutes were struck at Dijon by various masters of the mint.⁵⁷

In 1436 the Duke of Burgundy renounced his alliance with England, and went over to the side of Charles VII.

1. *Obv.*—m.m. St. Suaire or Veronica. $\text{h}\epsilon\text{NRIQVS} \times \text{D}\epsilon\text{I} \times$
 $\text{GR}\Lambda \times \text{FR}\Lambda\text{QORV} \times \text{A}\text{G}\text{LI} \times \text{R}\epsilon\text{X}$. Usual type,
but the Angel Gabriel is in profile instead of
half facing; $\text{AV}\epsilon$ written downwards.

Rev.—m.m. Veronica. $\text{XPQ} \times \text{VINQIT} \times \text{XPQ} \times \text{R}\epsilon\text{G}\text{N}\Lambda\text{T} \times$
 $\text{XPQ} \times \text{INP}\epsilon\text{R}\Lambda\text{T} \times$. Usual type.

Wt. 51.6 grs. [PL. XXII. 9.]

British Museum.

2. *Obv.*—As last.

Rev.—m.m. Veronica. $\text{XPQ} \times \text{VINQIT} \times \text{XPQ} \times \text{R}\epsilon\text{G}$ —
 $\text{N}\Lambda\text{T} \times \text{XPQ} \times \text{INP}\epsilon\text{R}\Lambda\text{T}$. Usual type.

Wt. 52 grs.

Walters Collection.

3. As last, but reading VNQIT (*sic*).

Wt. 51.8 grs. Bernard Roth Collection.

4. *Obv.*—As last.

Rev.—m.m. Veronica. $\text{XPQ}' \star \text{VINQIT} \times \text{XPQ}' \star$
 $\text{R}\epsilon\text{G}\text{N}\Lambda\text{T} \times \text{XPQ}' \star \text{INP}\epsilon\text{R}\Lambda\text{T}$. Usual type.

Wt. 45.2 grs.

My Collection.

⁵⁷ *Arch. de Dijon*, reg. B 11213, fo 14 v°, 11215, f° 107 v° à 111 r°, 118 v°, 120 v° à 122 r°.

5. *Obv.*—m.m. Veronica. $\text{H}\bar{\text{A}}\text{R}\bar{\text{I}}\text{Q}\text{V}\text{S} \times \text{D}\bar{\text{A}}\text{I} \times \text{G}\bar{\text{R}}\bar{\text{A}} \times$
 $\text{F}\bar{\text{R}}\bar{\text{A}}\text{Q}\text{O}\text{R}\text{V} \times \text{Z} \times \text{A}\bar{\text{G}}\text{L}\bar{\text{I}}\bar{\text{A}} \times \text{R}\bar{\text{A}}\text{X}.$ Stops, sal-
 tires; a five-pointed star under the last letter
 of legend. Usual type, the Angel Gabriel
 half face; $\text{A}\bar{\text{V}}\bar{\text{A}}$ written upwards.

Rev.—m.m. Veronica. $\text{X}\text{P}\bar{\text{Q}} \star \text{V}\bar{\text{I}}\bar{\text{N}}\bar{\text{Q}}\bar{\text{I}}\text{T} \star \text{X}\text{P}\bar{\text{Q}} \star$
 $\text{R}\bar{\text{A}}\bar{\text{G}}\bar{\text{N}}\bar{\text{A}}\text{T} \star \text{X}\text{P}\bar{\text{Q}} \star \text{I}\bar{\text{N}}\bar{\text{P}}\bar{\text{A}}\text{R}\bar{\text{A}}\text{T} \star.$ Stops, a five-
 pointed star; a five-pointed star under the
 first letter of legend.

Wt. 53.1 grs. De Saulcy Collection.

6. *Obv.* As No. 4, but reading $\text{H}\bar{\text{A}}\text{R}\bar{\text{I}}\text{Q}\text{V}\text{S}$ (*sic*).

Rev.—As No. 4, but reading $\text{I}\bar{\text{N}}\bar{\text{P}}\bar{\text{A}}\text{R}\bar{\text{A}}\text{T}.$

Wt. 53.3 grs. Walters Collection.

Auxonne.

No coins are known of this mint, but the fact that there was a mint here is established by an entry in the *Archives de Dijon*⁵⁸ that Jehan de Plaine, general master of the mints of the Duke of Burgundy, had arrived at Dijon to open the “boîtes” of deniers d’or et d’argent of the mints of Dijon and Auxonne. On January 26, 1430, he opened two “boîtes” of salutes struck at Auxonne.

Angelot.

Struck in accordance with the order of May 24, 1427.
 Weight 38.6 grains (105 to the mark).

The angelot is two-thirds of a salute.

Paris.

Obv.—m.m. crown. $\text{H}\bar{\text{A}}\text{N}\bar{\text{R}}\bar{\text{I}}\text{Q}\text{V}\text{S} : \text{F}\bar{\text{R}}\bar{\text{A}}\text{N}\bar{\text{Q}}\text{O}\text{R}\text{V} : \bar{\text{E}}\text{T} :$
 $\text{A}\bar{\text{N}}\bar{\text{G}}\bar{\text{L}}\bar{\text{I}}\bar{\text{A}} : \text{R}\bar{\text{A}}\text{X}.$ Stops, pellets. An Angel
 with outspread wings standing facing, holding
 two shields bearing the arms of France and
 England, within a beaded inner circle.

⁵⁸ *Arch. de Dijon*, reg. B 11215, f^o 115 v^o.

Rev.—m.m. crown. XPQ : VINQIT : XPQ : RAGNIAT :
XPQ : IMPERAT. Stops, pellets. A plain
cross, dividing a fleur-de-lis and a leopard,
within a beaded inner circle.

Wt. 35·8 grs. [Pl. XXIII. 1.]

British Museum.

Chalons.

On February 14, 1429, were delivered to Jehan Revier two "pilles" and four "trosseaux" to strike angelots.⁵⁹ I have not found any angelots bearing the Chalons mint-mark.

Le Mans.

Obv.—m.m. root. hAURIQVS : FRANDORV : AT :
ANGLIA : REX. Type as before.

Rev.—m.m. root. XPQ' : VINQIT : XPQ' : RAGNIAT :
XPQ : IMPERAT. Type as before.

Wt. 35 grs. [Pl. XXIII. 2.]

British Museum.

Rouen.

On September 30, 1445, Guillemin le Musnier struck 600 angelots. On November 10, 1446, he struck 100.

From December 10, 1446, to December 9, 1447, Pierre de Preaulx struck 2100 angelots. From January 16, 1448, to January 16, 1449, he struck 1400.⁶⁰

Etienne Marcel, who was master of the mint from 1434 to 1444, placed no secret mark on the angelots struck by him. Presumably, Guillaume le Monnier placed the same mark (a pellet under the last letter but one of the legends) on the angelots as on his salutes, and Pierre de Preaulx also placed his secret mark, an annulet enclosing pellet under the last letter but one of the legends, on his angelots.

⁵⁹ *Arch. Nat.*, reg. Z 1^B, 3, 128 r^o.

⁶⁰ *Ibid.*, reg. Z 1383, carton Z 1^B, 963-967.

Obv.—m.m. leopard. HÆNRIQVS : FRANKORV : ET :
ANGLIÆ : REX. Usual type.

Rev.—m.m. leopard. XPQ : VINQIT : XPQ : RÆGNIAT :
XPQ : IMPERAT. Usual type.

Wt. 29·6 grs. [Pl. XXIII. 3.]
British Museum.

St. Ló.

Obv.—m.m. fleur-de-lis. HÆNRIQVS : FRANKORV :
ET : ANGLIÆ : REX. Usual type.

Rev.—m.m. fleur-de-lis. XPQ' : VINQIT : XPQ' :
RÆGNIAT : XPQ' : IMPERAT. Usual type.

Wt. 35·7 grs. [Pl. XXIII. 4.]
British Museum.

Pattern angelot.

There is a piedfort, in the Bibliothèque Nationale, of base silver, which is evidently struck from a die of a pattern for the angelot. The obverse type was apparently accepted, and the reverse type rejected.

Obv.—m.m. leopard. HÆNRIQVS : FRANKORV : ET :
ANGLIÆ : REX. Same type as ordinary angelot.

Rev.—m.m. fleur-de-lis. FIAT ° PAX ° IN ° VIRTUTE °
TVÆ ° ET °. Cross pattée with quatrefoil centre, within a tressure of eight arches; a fleur-de-lis crowned in each angle, a pellet in the angles of the tressure.

[Pl. XXIII. 5.]

Cab. de Fr.

SILVER COINAGE.

Grand blanc.

Issued in accordance with the ordinance of November 23, 1422, at the rate of 75 pieces to the mark (weight 54·17 grains), and current for 10 deniers tournois.

Paris.

On December 17, 1423, an order was issued to join together the stops on the reverse thus: ‡

On September 28, 1428, twenty-four sets of dies for the grand blanc were received from the engraver. On December 17 following, four sets of dies were returned to him.

1. *Obv.*—m.m. crown. FRANKORVM : ET : ANGLIA :
REX. The shields of France and of England
side by side, h̄ARIQVS above.

Rev.—m.m. crown. SIT : NOMANI : DNI : BANEDICTV.
Plain cross dividing fleur-de-lis and leopard;
h̄ARIQVS below with a straight line under.
The cross is broadly formed, and the fleur-
de-lis and leopard are large.

Wt. 49·7 grs. [Pl. XXIII. 6.]

My Collection.

2. *Obv.*—As last.

Rev.—m.m. crown. SIT : NOMANI : DNI : BANEDICTV.
TVSM. Type as before, but the cross is less
broad, and the fleur-de-lis and leopard smaller.

Wt. 49·7 grs.

My Collection.

3. Usual type, but with pellet under the first letter of the legends.

Cab. de Fr.

4. Usual type, but with stops on reverse joined together.

- [Pl. XXIII. 7.]

Cab. de Fr.

Amiens.

From April 7, 1424, to December 7, 1434, 380,260 grands blancs were struck at this mint.⁶¹

Obv.—m.m. Agnus Dei. FRANKORVM : ET : ANGLIA :
RAX. Usual type.

Rev.—m.m. Agnus Dei. SIT : ROMAN : DNI : BENEDICTV. Usual type.

Wt. 46.9 grs. [Pl. XXIV. 1.]

Walters Collection.

Arras.

I have not come across a grand blanc of this mint, nor any record of one. It ought, however, to have been struck. The order of November 23, 1422, was sent to Arras on the 14th of the following month. The mint-mark of Arras was a lozenge.

Auxerre.

The order of November 23, 1422, was sent to Auxerre on the 18th of the following month.

On March 3, 1428, a trial box of the Auxerre mint was opened, and found to contain 15 sols 8 deniers of grands blancs, that is, 188 pieces. This represents an issue of 135,360 grands blancs. About two-fifths of the issue were below standard. Six sets of dies for the grand blanc were promised to be sent to Auxerre on May 28, 1428.

1. *Obv.*—m.m. Fer de moulin. FRANKORVM : ET :
ANGLIA : RAX. Usual type.

Rev.—m.m. Fer de moulin. SIT : ROMAN : DNI :
BENEDICTV. Usual type.

Wt. 47.5 grs. [Pl. XXIII. 8.]

Walters Collection.

⁶¹ *Arch. Nat.*, reg. en papier Z 1380, du carton Z 1^{er}, 815.

2. *Obv.*—As last.

Rev.—As last, but reading BENEDICTVM.

Wt. 41·9 grs. [Pl. XXIII. 9.]
Walters Collection.

Chalons.

The order of November 23, 1422, was sent to Chalons on the 18th of the following month. On June 27, 1423, 600 marks of silver were sent to Chalons to strike the grands blancs and other moneys then struck at the other mints.⁶²

1. *Obv.*—m.m. crescent. FRANQORVM: ET: ANGLIA: REX. Usual type.

Rev.—m.m. crescent. SIT: ROMAN: DNI: BENEDICTV. Usual type.

Wt. 44·8 grs. [Pl. XXIV. 2.]
My Collection.

The crescent is placed with points upwards on this coin.

2. *Obv.*—As last, but reading FRANQORVM.

Rev.—As last.

Wt. 50·8 grs. British Museum.

3. As No. 1, but crescent placed with points to r.

* Le Carpentier Collection (Poey d'Avant, No. 3197).

Le Mans.

Six sets of dies for the grand blanc were sent to Le Mans on October 27, 1425. On July 17, 1432, it was decided to remove the pellet placed before the mint-mark on the dies of the grand blanc of Andriet Marcel, which were to be broken.

⁶² Sorb. H., 1, 9, n° 174, 173 v°.

1. *Obv.*—m.m. root, pellet to l. FRANCORVM : ET : ANGLIA : REX. Usual type.

Rev.—m.m. root, pellet to l. SIT : ROMANI : DNI : BENEDICTV. Usual type.

Wt. 48·4 grs. De Saulcy Collection.

This is the grand blanc struck prior to July 17, 1432.

2. *Obv.*—m.m. root alone. Legends and type as last.

Rev.—m.m. root alone. Legends and type as last.

Wt. 43 grs. [Pl. XXIV. 3.]
My Collection.

3. *Obv.*—As last.

Rev.—As last, but reading BENEDICTVM.

Wt. 49·2 grs. De Saulcy Collection.

4. *Obv.*—As last.

Rev.—As last, but reading BENEDICTVM.

[Pl. XXIV. 4.] Walters Collection.

I am doubtful about the attribution of this coin. The mint-mark appears to be a root, but is much more regularly formed than the usual mint-mark of Le Mans. It is in the form of a circle with five bent claws.

These grands blancs were struck after July 17, 1432.

Macon.

The order of November 23, 1422, was sent to Macon on the 18th of the following month.

Obv.—m.m. trefoil. FRANCORVM : ET : ANGLIA : REX. Usual type.

Rev.—m.m. trefoil. SIT : ROMANI : DNI : BENEDICTV. Usual type.

Wt. 44·7 grs. [Pl. XXIV. 5.]
My Collection.

Nevers.

The order of November 23, 1422, was sent to Nevers on January 6, 1423.

1. *Obv.*—m.m. star. FRANKORVM : ET : ANGLIA :
REX. Usual type.

Rev.—m.m. star. SIT : NOMIN : DNI : BENEDICTV.
Usual type.

Wt. 46·7 grs.

My Collection.

2. *Obv.*—As last.

Rev.—As last, but reads NOMIN.

Wt. 42 grs. [Pl. XXIV. 6.]

British Museum.

3. *Obv.*—As last.

Rev.—As last, but reads NOMA.

Wt. 46·9 grs.

De Sauley Collection.

The illustration of this coin in De Sauley's book gives the reading NOMAIN.

4. *Obv.*—As last.

Rev.—As No. 1, but reads BENEDICT, and a pellet to the l. of the fleur-de-lis.

Wt. 48·8 grs.

De Sauley Collection.

Rouen.

Between July 5 and November 4, 1423, 1,226,160 grands blancs were struck at Rouen. Between February 21, 1433, and May 23, 1440, 200,985 grands blancs were struck.

On November 17, 1428, and again on the 29th of the same month, complaints were made that some of the grands blancs of Rouen were without the abbreviation

mark over the *hæRICVS* on the obverse. They were melted down.⁶³

1. *Obv.*—m.m. leopard. *FRANCORVM : ET : ANGLIA :*
REX. Usual type.

Rev.—m.m. leopard. *SIT : NOMAN : DNI : BENEDICTV.* Usual type.

Wt. 48·3 grs.

My Collection.

2. Same legends and type as last, but pellet under the last (20th) letter of the legends, and a small cross on the reverse.

Wt. 47·7 grs. [Pl. XXIV. 7.]

My Collection.

St. Lô.

Some grands blancs of St. Lô were found without the abbreviation mark on the *hæRICVS* on the obverse, at the same time as those of Rouen (see p. 401).

Obv.—m.m. fleur-de-lis. *FRANCORVM : ET : ANGLIA :*
REX. Usual type.

Rev.—m.m. fleur-de-lis. *SIT : NOMAN : DNI :*
BENEDICTV. Usual type. Large leopard and fleur-de-lis on either side of the cross.

Wt. 47·9 grs. [Pl. XXIV. 8.]

My Collection.

St. Quentin.

The order of November 23, 1422, was sent to St. Quentin on December 14, 1422.

On March 5, 1427, a pellet is ordered to be placed under the 16th letters of the legends.⁶⁴

I have not come across a specimen of the grand blanc of St. Quentin struck before March 5, 1427, but

⁶³ *Arch. Nat.*, reg. Z 1^{er}, 3, 124 v^o et 125 r^o et v^o.

⁶⁴ *Registre entre 2 ais*, 159 v^o.

no doubt it exists. Poey d'Avant does not mention the pellet in the specimen quoted by him (No. 3195), but he gives no illustration of the coin.

Obv.—m.m. spur rowel. RRANQORVM : ET : ANGLIA :
RAX. Pellet under I of ANGLIA. Usual
type.

Rev.—m.m. spur rowel. SIT : NOMAN : DNI : BAN-
DICTV. Pellet under D of BANDICTV. Usual
type.

Wt. 47.7 grs. De Saulcy Collection.

The mint-mark is formed like a five-pointed star, pierced in the centre. Poey d'Avant describes the mint-mark as a pierced star.

Troyes.

The order of November 23, 1422, was sent to Troyes on December 18, 1422.

1. *Obv.*—m.m. rosette. RRANQORVM : ET : ANGLIA :
RAX. Usual type.

Rev.—m.m. rosette. SIT : NOMAN : DNI : BAN-
DICTV. Usual type.

Wt. 45.6 grs. [Pl. XXV. 1.]

British Museum.

2. *Obv.*—As last.

Rev.—As last, but reading BANDICTVM. The rosette
is stated to have its petals hollowed out.

Wt. 48.4 grs. De Saulcy Collection.

3. *Obv.*—As No. 1.

Rev.—As No. 1, but reading NOMN (*sic*).

Quoted by De Saulcy, who does not state
in whose collection it occurs.

Dijon.

From March 1, 1423, to September 14, 1435, 878,100 grands blancs were struck at Dijon by various masters of the mint.⁶⁵

Obv.—m.m. St. Suaire or Veronica. FRANDORVM :
ET : ANGLIA : REX. Stops, annulets. Usual
type.

Rev.—m.m. Veronica. SIT : ROMANI : DNI : BANDA-
DICTVM :: Stops, annulets. Usual type.
Wt. 46.1 grs. De Saulcy Collection.

It will be recollected that the mint of Dijon belonged to the Duke of Burgundy. De Saulcy considers that this coin was struck just before he went over to the side of Charles VII, in 1436, as the stops used are similar to those used on the coins of Charles VII struck by the Duke of Burgundy after his treaty with him.

Auxonne.

Grands blancs were also struck by the Duke of Burgundy at this mint, as appears from the entry in the *Archives de Dijon* quoted above (p. 394). On January 26, 1430, two trial boxes of grands blancs struck at Auxonne were opened.

Petit blanc.

Issued in accordance with the ordinance of June 4, 1423, at the rate of 150 pieces to the mark (weight 27.08 grains), and current for 5 deniers tournois.

Paris.

1. *Obv.*—m.m. crown. HEN RICVS REX. The shields of France and England side by side, the outer sides overlapping the inner circle and dividing the legend.

⁶⁵ *Arch. de Dijon*, reg. B. 11215, f° 92 et seq.

Rev.—m.m. crown. SIT : NOMA : DNI : BANIADICTV.
Plain cross, dividing h - R, within inner circle.

Wt. 23 grs. [Pl. XXV. 3.]

British Museum.

2. *Obv.*—m.m. crown, annulet below. hAN · RIQVS · RAX.
Stops, stars. Type as last.

Rev.—m.m. crown, annulet below. As last.

Wt. 25 grs. Published by Delombardy
(No. 147).

Compare the salute of Paris, No. 4 (p. 384), and the
denier tournois (p. 408).

Chalons.

Obv.—m.m. crescent. hAN RIQVS RAX. Usual type.

Rev.—m.m. crescent. SIT : NOMA : DNI : BANIADICTV.
Usual type.

Wt. 23·4 grs. De Saulcy Collection.

Le Mans.

On October 27, 1425, two sets of dies for coining petits
blancs were sent to Le Mans.

On July 17, 1432, the pellet placed before the mint-
mark was removed.

Obv.—m.m. root. hAN RIQVS RAX. Pellet before
mint-mark. Usual type.

Rev.—m.m. root. SIT : NOMA : DNI : BANIADICTV.
Pellet before mint-mark. Usual type.

Wt. 21·8 grs. De Saulcy Collection.

This coin was struck before July 17, 1432.

Rouen.

Obv.—m.m. leopard. hAN RIQVS RAX. Usual type.

Rev.—m.m. leopard. SIT : NOMA : DNI : BANIADICTV.
Usual type.

Wt. 21·1 grs. [Pl. XXV. 4.]

My Collection.

Troyes.

Obv.—m.m. rose. $\text{h}\bar{\text{a}}\text{N RIQVS R}\bar{\text{a}}\text{X}$. Usual type.

Rev.—m.m. rose. $\text{SIT : NOM}\bar{\text{a}} : \text{DNI : BAN}\bar{\text{a}}\text{DIQTV}$.
Usual type.

Van Peteghem Collection; published by
De Saulcy.

Poey d'Avant describes a demi-blanc from the Le Carpentier Collection with the mint-mark pierced star, or fer de moulin (*Monnaies féodales de France*, No. 3213). This must be the spur rowel, the mint-mark of St. Quentin. He also describes two demi-blancs with the mint-mark a Maltese cross (Nos. 3216, 3217), which is probably the mill-rind, the mint-mark of Auxerre. These he states are in the French National Collection, which he says also contains demi-blancs with the mint-marks trefoil (Macon) (No. 3218), Paschal Lamb (Amiens) (No. 3220), and cross (No. 3219) (uncertain), but when I applied to the Bibliothèque Nationale for casts of these coins for illustration, I was informed that they did not possess them.

Dijon.

Between February 13, 1427, and August 29, 1435, 35,000 petits blancs were struck.

Obv.—m.m. St. Suaire or Veronique. $\text{h}\bar{\text{a}}\text{N RIQVS R}\bar{\text{e}}\text{X}$.
Usual type.

Rev.—m.m. Veronique. $\text{SIT : NOM}\bar{\text{a}} : \text{DNI : BAN}\bar{\text{a}}\text{-DIQTV}$. Usual type.

Wt. 20.3 grs. De Saulcy Collection.

Tresin.

Issued in accordance with the ordinance of June 4, 1423. The order to the masters of the mints is dated

June 22, 1423. It was struck at the rate of 150 to the mark (weight 27·08 grains) and was current for 3 deniers tournois.

Paris.

The engraver of the mint at Paris was ordered to engrave thirteen sets of dies for the tresin, and between June 26 and 28, 1423, 62,880 tresins were struck.

Obv.—m.m. crown. HENRI QV S · REX. Stop, pellet.
The shields of France and England, side by side, surmounted by a large crown. The outer sides of the shield overlap the inner circle, dividing the legend.

Rev.—m.m. crown. TVRONVS · TRIPLAX · FRANQ.
Stops, pellets. Plain cross, dividing fleur-de-lis and leopard, within an inner circle.

[Pl. XXV. 5.]

Cab. de Fr.

M. de Saulcy describes and illustrates another specimen from the Gariel Collection, weighing 25 grains.

Rouen.

The type ("patron") of the tresin was sent to Rouen on June 22, 1423, with a note to the engraver to place a leopard "in the place of the crown on both obverse and reverse. I have not come across a specimen of the tresin struck at Rouen.

Denier tournois.

First Issue.

Issued in accordance with the ordinance of June 4, 1423, at the rate of 225 pieces to the mark (weight 18·08 grains), and current for one denier tournois.

Paris.

Obv.—m.m. crown, annulet below. · hēNRICVS · REX · .
Stops, stars. Fleur-de-lis and leopard passant
to l., within beaded inner circle.

Rev.—m.m. crown, annulet below. · TVRONVS ·
FRANCIÆ · Stops, stars. Cross pattée,
within beaded inner circle.

Wt. 17 grs. Published by M. l'Abbé
Garnier in the *Annuaire de la Société de
Numismatique*, 1884, p. 68.

Compare the salute of Paris (p. 384) and the petit
blanc (p. 405). This coin bears the star stops which
also appear on the petit blanc with the same mint-
mark.

Auxerre.

Obv.—m.m. Fer de moulin. hēNRICVS · REX. Usual
type.

Rev.—m.m. Fer de moulin. TVRONVS · FRANCIÆ.
Usual type.

Wt. 15 grs. [Pl. XXV. 6.]
British Museum.

Chalons.

Obv.—m.m. crescent. hēNRICVS · REX. Usual type.

Rev.—m.m. crescent. TVRONVS · FRANCIÆ. Usual
type.

Wt. 14·6 grs. [Pl. XXV. 7.]
British Museum.

Le Mans.

On October 27, 1425, two sets of dies for the denier
tournois were sent to Le Mans.

Obv.—m.m. root. hēNRICVS · REX. Usual type.

Rev.—m.m. root. TVRONVS · FRANCIÆ. Usual type.

Wt. 14·1 grs. De Sauley Collection.

Rouen.

Etienne Marcel struck 69,345 deniers tournois of this issue between March 20 and April 10, 1441.

The type ("patron") of the denier tournois was sent to Rouen on June 22, 1423. The engraver is told to place a leopard in the place of the crown on the obverse and reverse.

Obv.—m.m. leopard. $\text{h}\bar{\text{e}}\text{NRIQVS} \circ \text{R}\bar{\text{A}}\text{X}$. Usual type.

Rev.—m.m. leopard. $\text{TVRONVS} \circ \text{FR}\bar{\text{A}}\text{N}\bar{\text{Q}}\bar{\text{I}}\bar{\text{A}}$. Usual type.

Wt. 17.2 grs. [Pl. XXV. 8.]
My Collection.

St. Lô.

1. *Obv.*—m.m. fleur-de-lis. $\text{h}\bar{\text{e}}\text{NRIQVS} \circ \text{R}\bar{\text{A}}\text{X}$. Usual type.

Rev.—m.m. fleur-de-lis. $\text{TVRONVS} \circ \text{FR}\bar{\text{A}}\text{N}\bar{\text{Q}}\bar{\text{I}}\bar{\text{A}}$. Usual type.

Wt. 14.8 grs. De Saulcy Collection.

2. As last, but words separated by mullets on obverse and reverse.

Wt. 13.3 grs. De Saulcy Collection.

3. *Obv.*—m.m. fleur-de-lis (?). $\text{h}\bar{\text{e}}\text{NRIQVS} \circ \cdot \text{R}\bar{\text{A}} \cdot \text{R}\bar{\text{A}}\text{X}$.
• Two annulets after $\text{h}\bar{\text{e}}\text{NRIQVS}$. Stops, mullets. Usual type.

Rev.—m.m. fleur-de-lis (?). $\text{TVRONVS} \cdot \text{FR}\bar{\text{A}}\text{N}\bar{\text{Q}}\bar{\text{I}}\bar{\text{A}}$.
Stop, mullet. Usual type.

Wt. 15.1 grs. My Collection.

Unfortunately, this coin is not well preserved, but the mint-mark appears to be a fleur-de-lis. It would be interesting to attribute it to the second or third issue of Rouen, but I cannot do so with any certainty.

Troyes. .

Obv.—m.m. rose. hĒNRICVS ◦ REX. Usual type.

Rev.—m.m. rose. TVRONVS ◦ FRANCIÆ. Usual type.

Wt. 14·8 grs. [Pl. XXV. 9.]

De Sauley Collection.

Dijon.

Between September 5, 1426, and October 23, 1427, 69,750 deniers tournois were struck at Dijon.⁶⁶

Obv.—m.m. St. Suaire or Veronica. hĒNRICVS ◦ REX.
Usual type.

Rev.—m.m. Veronica. TVRONVS ◦ FRANCIÆ. Usual
type.

Wt. 17·2 grs. De Sauley Collection.

Second Issue.

This issue was made by Pierre de Preaulx at Rouen between June 22, 1447, and December 9, 1447, and consisted of 85,840 deniers tournois, at the rate of 231 to the mark. This gives a weight of 17·6 grains, a slight reduction from the previous issue.

This issue is distinguished from the previous issue by the words of the legend being divided by a "hollow stop" (point creux).

No denier tournois of this issue has yet been published.

Third Issue.

This issue was also made by Pierre de Preaulx at Rouen on January 16, 1448. It consisted of 97,200 denier tournois, at the same rate as those of the first issue, *i.e.* 225 to the mark, weighing 18·08 grains. It

⁶⁶ *Arch. de Dijon*, reg. B. 11215, f° 97.

was distinguished from the previous issue by mullet stops.

No denier tournois of this issue has yet been published.

Maille tournois.

Issued in accordance with the ordinance of June 4, 1423, at the rate of 300 to the mark, weighing 13·54 grains. The writ for this issue was sent out on June 22, 1423, but was not accompanied by the types for the maille tournois, which were to follow as soon as possible.

On December 17, 1423, the general masters of the mint were ordered to place a pellet under the α of HÆNRICVS and the α of CIVIS for those at Rouen, and a pellet under the s of HÆNRICVS and the s of CIVIS for those struck at St. Lô.

Rouen.

Obv.—HÆNRICVS · REX. Stop, pellet; pellet under the α of HÆNRICVS. Leopard passant to l., cross pattée above, extending to edge of coin.

Rev.—OBOLVS · CIVIS. Stop, pellet; pellet under the α of CIVIS. Fleur-de-lis, cross pattée above, extending to edge of coin.

[Pl. XXV. 10.]

St. Lô.

As last, but pellet under the s of HÆNRICVS and CIVIS.

Cab. de Fr.

Denier parisis.

— *First Issue.*

The first issue of deniers parisis was made on May 31, 1424, and was at the rate of 180 to the mark, giving a weight of 21 grains.

Paris.

On June 5 and 7, 1424, and September 7, 1424, 90,840 deniers parisis were struck; and on January 5 and 7, 1425, 29,212 pieces were struck.

On September 6, 1424, three sets of dies to strike deniers parisis were delivered to the mint, and on September 9 following thirteen sets of dies were delivered up, "the striking of deniers parisis having ceased."

Obv.—FRANCORV · Z · AGL · REX. Stops, pellets.
 h̄ARI across field; fleur-de-lis and leopard below, within beaded inner circle. The whole surmounted by a large crown which extends to the top of the coin.

Rev.—m.m. crown. PΛ | RISI | VSOQ | IVIS. Stop, annulet. Large cross pattée, within beaded inner circle, a fleur-de-lis at the end of each limb, dividing the legend.

Wt. 18·6 grs. [Pl. XXV. 11.]

My Collection.

Second Issue.

Struck in accordance with the order of November 12, 1426, and issued on December 30, 1426. This issue was struck at the same rate to the mark as June 1.

Paris.

From December 30, 1426, to January 13, 1427, 596,362 deniers parisis were struck. Thirty-one sets of dies were delivered to the engraver on December 30, 1426.

Obv.—FRANCORV · Z · AGL · REX. Stops, pellets.
 h̄ARI across field, within beaded inner circle, and surmounted by a large crown extending to the top of the coin.

Rev.—m.m. crown. PARISIVS • CIVIS. Stop, annulet. Small cross pattée, fleur-de-liacé, within beaded inner circle.

Wt. 16.6 grs.

[Pl. XXV. 12.]
British Museum.

Amiens.

On February 8, 1427, 34,560 deniers paris is were struck at Amiens. I have not come across any specimen of this issue. The names of the mint master and moneyer are those of the officials at the Paris mint at that date, and it seems possible that the chronicler is mistaken in his statement that this issue was made at Amiens.

LIONEL M. HEWLETT.

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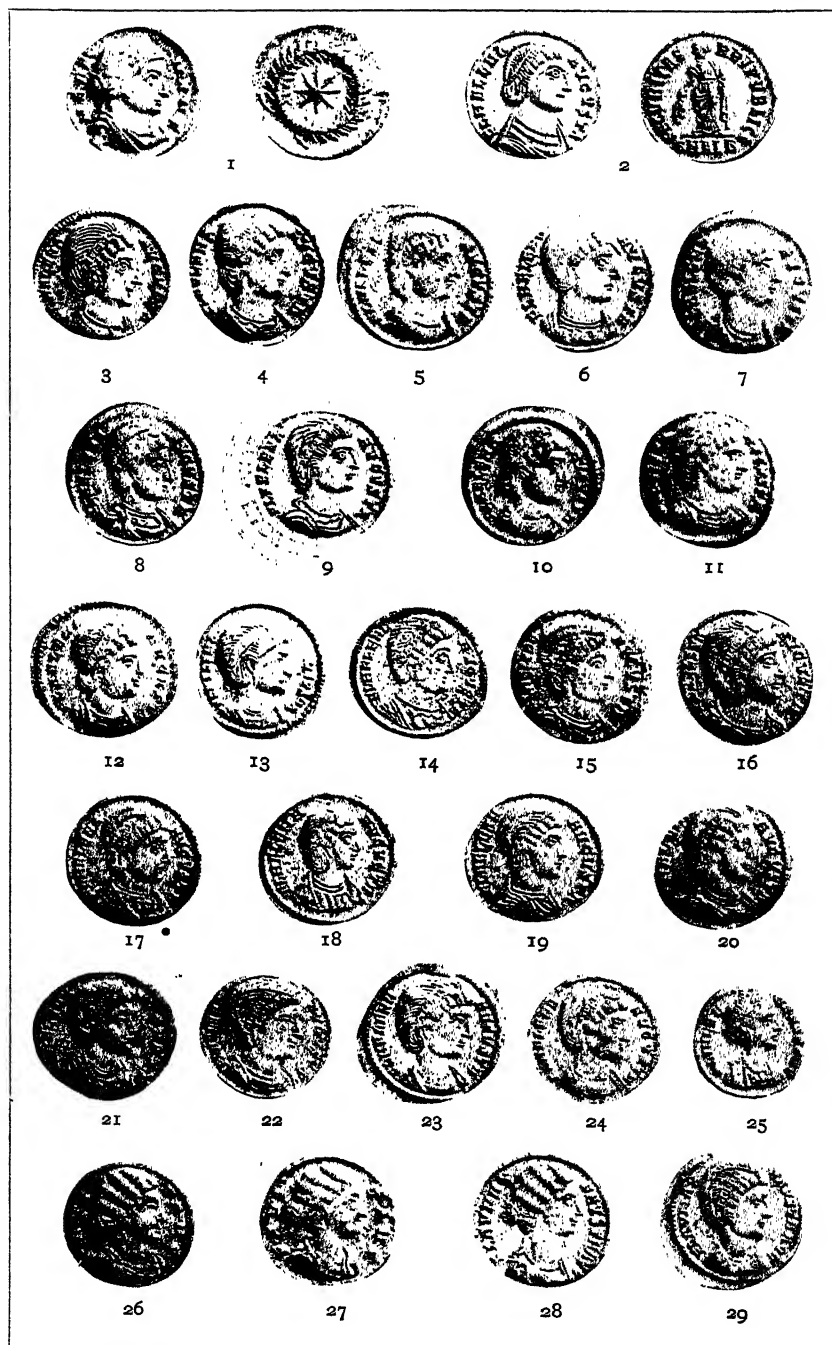
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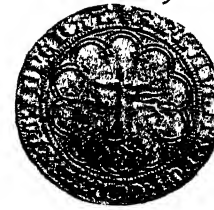
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COINS OF HELENA AND FAUSTA



ANGLO-GALLIC COINS
HENRY VI



1



2



3



4



6



6



7 •



5



7



8



9



8

ANGLO-GALLIC COINS
HENRY VI



1

2



5



3



6



7



8

ANGLO-GALLIC COINS
HENRY VI



1



2



3



4



5



6



7



8



9



10



11



12



13



ANGLO-GALLIC COINS
HENRY VI

LIST OF FELLOWS
OF THE
ROYAL
NUMISMATIC SOCIETY
1912

PATRON
HIS MAJESTY THE KING

LIST OF FELLOWS
OF THE
ROYAL
NUMISMATIC SOCIETY
1912

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- 1911 WARRE, FELIX W., Esq., 231A, St. James's Court, Buckingham Gate, S.W.
- 1901 *WATERS, CHARLES A., Esq., Highfield, Woolton Road, Wavertree, Liverpool.
- 1901 WEBB, PERCY H., Esq., 4 & 5, West Smithfield, E.C., *Hon. Treasurer.*
- 1885 *WEBER, F. PARKES, Esq., M.D., F.S.A., 19, Harley Street, W.
- 1888 *WEBER, SIR HERMANN, M.D., 10, Grosvenor Street, Grosvenor Square, W.
- 1884 WEBSTER, W. J., Esq., Melrose, Beulah Road East, Thornton Heath.
- 1904 WEIGHT, WILLIAM CHARLES, Esq., Wilton Dene, Wilbury Hill Road, Letchworth.
- 1905 WEIGHTMAN, FLEET-SURGEON A. E., F.S.A., Junior United Service Club, Charles Street, St. James's, S.W.
- 1899 WELCH, FRANCIS BERTRAM, Esq., M.A., Oswestry School, Oswestry, Shropshire.
- 1869 *WIGRAM, MRS. LEWIS, The Rookery, Frensham, Surrey.
- 1908 WILLIAMS, T. HENRY, Esq., 85, Clarendon Road, Putney, S.W.
- 1910 WILLIAMS, W. I., Esq., 22, High Durham Street, Bishop Auckland, Durham.
- 1881 WILLIAMSON, GEO. C., Esq., F.R.S.L., Burgh House, Well Walk, Hampstead, N.W.
- 1906 WILLIAMSON, CAPT. W. H. (address not known).
- 1869 WINNER, THOMAS B., Esq., F.R.G.S., F.I.A., 81, Shooter's Hill Road, Blackheath, S.E.
- 1904 WINTER, CHARLES, Esq., Oldfield, Thetford Road, New Malden, Surrey.
- 1906 WOOD, HOWLAND, Esq., 93, Percy Street, Brookline, Massachusetts, U.S.A.
- 1860 WORMS, BARON G. DE, F.R.G.S., F.S.A., V.P.R.S.L., F.G.S., D.L., J.P., 17, Park Crescent, Portland Place, W.
- 1903 WRIGHT, THE HON'BLE MR. H. NELSON, I.C.S., M.R.A.S., Bareilly, United Provinces, India.
- 1889 YEATES, F. WILLSON, Esq., 7, Leinster Gardens, Hyde Park, W.

ELECTED

- 1880 YOUNG, ARTHUR W., Esq., 12, Hyde Park Terrace, W.
 1898 YOUNG, JAMES, Esq., 14, Holland Road, W.
 1900 ZIMMERMANN, REV. JEREMIAH, M.A., D.D., LL.D., 107, South Avenue, Syracuse, New York, U.S.A.
-

HONORARY FELLOWS

ELECTED

- 1898 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY,
 Palazzo Quirinale, Rome.
 1891 BABELON, M. ERNEST, Mem. de l'Inst. Bibliothèque Nationale,
 Paris.
 1903 BAHRFELDT, GENERAL-MAJOR M., Allenstein, East Prussia.
 1898 BLANCHET, M. J. A., 10, Bd. Emile Augier, Paris.
 1898 DRESSER, DR. H., Münz-Kabinet, Kaiser Friedrich Museum,
 Berlin.
 1899 GABRICI, PROF. DR. ETTORE, S. Giuseppe dei Nudi, 75, Naples.
 1898 GNECCHI, COMM. FRANCESCO, Via Filodrammatici 10, Milan.
 1886 HILDEBRAND, DR. HANS, Riksbibliotek, Stockholm.
 1873 IMHOOF-BLUMER, DR. F., Winterthur, Switzerland.
 1893 JONGHE, M. LE VICOMTE B. DE, Rue du Trône, 60, Brussels.
 1878 KENNER, DR. F., K.K. Museen, Vienna.
 1904 KUBITSCHKE, PROF. J. W., Pichlergasse, 1, Vienna.
 1898 LOEBBECKE, HERR A., Cellerstrasse, 1, Brunswick.
 1904 MAURICE, M. JULES, 33, Rue Washington, Paris.
 1898 MILANI, PROF. LUIGI ADRIANO, Florence.
 1906 †MOWAT, COMMANDANT ROBERT KNIGHT, 10, Rue des Feuillan-
 tines, Paris.
 1899 PICK, DR. BEHRENDT, Münzkabinet, Gotha.
 1895 REINACH, M. THÉODORE, 9, Rue Hammelin, Paris.
 1891 SVORONOS, M. J. N., Conservateur du Cabinet des Médailles,
 Athens.
 1886 WEIL, DR. RUDOLF, Schöneberger Ufer, 38, III., Berlin, W.

MEDALLISTS

OF THE ROYAL NUMISMATIC SOCIETY

ELECTED

- 1888 CHARLES ROACH SMITH, Esq., F.S.A.
 1884 AQUILLA SMITH, Esq., M.D., M.R.I.A.
 1885 EDWARD THOMAS, Esq., F.R.S.
 1886 MAJOR-GENERAL ALEXANDER CUNNINGHAM, C.S.I., C.I.E.
 1887 JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A.
 1888 DR. F. IMHOOF-BLUMER, Winterthur.
 1889 PROFESSOR PERCY GARDNER, Litt.D., F.S.A.
 1890 MONSIEUR J. P. SIX, Amsterdam.
 1891 DR. C. LUDWIG MÜLLER, Copenhagen.
 1892 PROFESSOR R. STUART POOLE, LL.D.
 1893 MONSIEUR W. H. WADDINGTON, Sénateur, Membre de l'Institut, Paris.
 1894 CHARLES FRANCIS KEARY, Esq., M.A., F.S.A.
 1895 PROFESSOR DR. THEODOR MOMMSEN, Berlin.
 1896 FREDERIC W. MADDEN, Esq., M.R.A.S.
 1897 DR. ALFRED VON SALLET, Berlin.
 1898 THE REV. CANON W. GREENWELL, M.A., F.R.S., F.S.A.
 1899 MONSIEUR ERNEST BABELON, Membre de l'Institut, Conservateur des Médailles, Paris.
 1900 PROFESSOR STANLEY LANE-POOLE, M.A., Litt.D.
 1901 S. E. BARON WLADIMIR VON TIESENHAUSEN, St. Petersburg.
 1902 ARTHUR J. EVANS, Esq., M.A., F.R.S., F.S.A., Keeper of the Ashmolean Museum, Oxford.
 1903 MONSIEUR GUSTAVE SCHLUMBERGER, Membre de l'Institut, Paris.
 1904 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY.
 1905 SIR HERMANN WEBER, M.D.
 1906 COMM. FRANCESCO GNECCHI, Milan.
 1907 BARCLAY VINCENT HEAD, Esq., D. Litt., D.C.L., Ph.D., Corr. de l'Inst.
 1908 PROFESSOR DR. HEINRICH DRESSSEL, Berlin.
 1909 H. A. GRUEBER, Esq., F.S.A.
 1910 DR. FRIEDRICH EDLER VON KENNER, Vienna.
 1911 OLIVER CODRINGTON, Esq., M.D., M.R.A.S., F.S.A.
 1912 GENERAL-LEUTNANT MAX BAHRFELDT, Dr.Phil.

PROCEEDINGS
OF THE
ROYAL NUMISMATIC SOCIETY.

PROCEEDINGS OF THE ROYAL NUMISMATIC SOCIETY.

SESSION 1911—1912.

OCTOBER 19, 1911.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A., President,
in the Chair.

The minutes of the meeting of May 18 were read and approved.

The President referred to the heavy loss sustained by the Society by the deaths of two of its Fellows, Mr. Max Rosenheim and Mr. Warwick Wroth.

Messrs. F. W. Jones, E. S. G. Robinson, and Maurice Rosenheim were proposed for election as Fellows of the Society.

The following Presents received since the May meeting were announced, and thanks were ordered to be sent to the donors :—

1. Broggen, A. W.: Et Myntfund fra Foldsen i Ryfylke, Norge. *Presented by the Author.*

2. Blanchet, A.: Notices Extraites de la Chronique de la Revue Numismatique, 1911. Pt. 2. *Presented by the Author.*

3. Codrington, O.: Coins from Seistan. *Presented by the Royal Asiatic Society.*

4. Costello, J. B., and M. J. Blake : Trade Tokens of the County of Galway in the Seventeenth Century. *Presented by L. Fletcher, Esq.*

5. Demole, E. : Médailles Genevoises décernées au "Secours Suisse." *Presented by the Author.*

6. Demole, E. : Sur une Monnaie d'Auguste. *Presented by the Author.*

7. Dodd, Miss A. E. : A History of Money in the British Empire and the United States. *Presented by the Publishers.*

8. Gardner, P. : The Earliest Coins of Greece Proper. *Presented by the Publishers.*

9. Gneccchi, F. : Appunti di Numismatica Romana, C, CI, and CII. *Presented by the Author.*

10. de Jonghe, Vicomte B. : Un Sou d'Or Pseudo-impérial. *Presented by the Author.*

11. Medallie Illustrations of the History of Great Britain and Ireland. Plates cli-clxx. *Presented by the Trustees of the British Museum.*

12. Laffranchi, L. : Caracalla e Elagabalò.

13. Laffranchi, L. : Bibliografia Numismatica Romana.

14. Laffranchi, L. : Varietà. *Presented by the Author.*

15. Seltman, E. J. : Su alcuni Tetradrammi Siciliani rari. *Presented by the Author.*

16. Wroth, W. : Catalogue of the Coins of the Vandals, Ostrogoths, and Lombards in the British Museum. *Presented by the Trustees of the British Museum.*

17. Aarbøgen for Nordisk Oldkyndighed og Historie, 1910.

18. Foreningen til Norske Fortidsmindesmerkens Bevaring Aarsberetning for 1910.

19. American Journal of Archaeology. xv., Pt. 2.

20. American Journal of Numismatics. xlv., Pts. 2 and 3.

21. Annual of the British School at Athens, 1909-1910.

22. Annual Report of the Government Museum, Madras, 1910-1911.

23. Annual Report of the Horniman Museum.

24. Annual Report of the Smithsonian Institute, 1909.
25. Annual Report of the United States National Museum, 1910.
26. British Numismatic Journal. Vols. iii to vi. *Presented by Miss Helen Farquhar.*
27. Bulletin de l'Académie Royale de Belgique. Nos. 3-8.
28. Canadian Antiquarian Journal. viii., Pt. 2.
29. Förvännen-Meddelanden från K. Vitterhets-Historie og Antikvitets Akademien, Stockholm, 1910.
30. Journal of Hellenic Studies. xxxi., Pt. 1.
31. Journal International d'Archéologie Numismatique, 1911. Pt. 3. *Presented by M. J. N. Svoronos.*
32. Journal of the Royal Society of Antiquaries of Ireland. xli., Pt. 2.
33. Monatsblatt der Numismatischen Gesellschaft in Wien. Nos. 335-338.
34. Numismatist, June-September, 1911.
35. Nordiske Fortidsminder. Vol. ii., Pt. 1.
36. Proceedings of the Royal Irish Academy. Vol. xxix., Nos. 5-8.
37. Revue Belge de Numismatique, 1911. Pts. 3 and 4.
38. Revue Numismatique, 1911. Pt. 2.
39. Revue Suisse de Numismatique. xvii., Pts. 1 and 2.
40. Suomen Museo, 1910.

Mr. J. G. Milne exhibited an unpublished Alexandrian tetradrachm of Severus Alexander, with reverse Julia Mamaea holding model of a gateway.

Mr. F. A. Walters exhibited a medallion (in two metals) of Commodus, without reverse, and a tetradrachm struck at Antioch with portraits of Mark Antony and Cleopatra.

Mr. L. G. P. Messenger exhibited a small bronze coin of Constantine II, with reverse SPES PVBLICA; *labarum* with the Christian monogram above.

Mr. Bernard Roth exhibited the quarter-stater (weight

19.6 grains) of Cunobelinus found at Westerham in 1889 and referred to by Sir John Evans in his "Supplement," p. 560, having the obverse legend *CA*—*CV* and the reverse *CVM*.

Mr. Henry Garside exhibited a series of recent coins of Australia (Sydney mint), Canada (Ottawa mint), and the Straits Settlements.

Mr. Henry Symonds exhibited a series of coins illustrating his paper on the Bristol mint.

Mr. Henry Symonds read a paper on "The Bristol Mint of Henry VIII and Edward VI," based on his researches in contemporary documents. The mint of Bristol was reopened in 1546 by Henry VIII, owing probably to the commercial importance and geographical situation of the town. William Sharington was appointed Under-Treasurer to the mint, which was the only country mint of the period to have a graver on the staff. Mr. Symonds gave numerous details regarding the changes in the mint staff, the salaries paid, and the amount of bullion coined, with an account of Sharington's wholesale issue of the prohibited "testoons." On his dismissal, Sharington was succeeded by Thomas Chamberlain. A reference to the coining of silver "with the print of angels" was quoted; none of these coins, which, the author of the paper suggested, may have been used in the ceremony of "touching," is known to have survived. Mr. Symonds pointed out that previous writers had assumed that the mint was reopened three years earlier than it really was, and suggested alterations in the present distribution of the coins of this period between Henry VIII and Edward VI. (This paper was printed in Vol. XI. (1911), pp. 331-350.)

NOVEMBER 16, 1911.

H. A. GRUEBER, Esq., F.S.A., Vice-President, in the Chair.

The minutes of the last meeting were read and approved.

Messrs. F. W. Jones, E. S. G. Robinson, and Maurice

Rosenheim were elected Fellows of the Society; Mr. Luther Clements was proposed for election.

The following Presents received since the last meeting were announced, and thanks were ordered to be sent to the donors:—

1. A. Blanchet: *Notices Extraites de la Chronique de la Revue Numismatique*, 1911. Pt. 3. *Presented by the Author.*

2. *Medallic Illustrations of the History of Great Britain and Ireland. Plates clxxi-clxxxiii and Indices. Presented by the Trustees of the British Museum.*

3. Ramsden, H. A.: *Chinese Paper Money. Presented by the Author.*

4. Ramsden, H. A.: *Modern Chinese Copper Coins. Presented by the Author.*

5. *Annual Report of the Deputy-Master of the Mint*, 1910.

6. *Archaeologia Cantiana.* xxix.

7. *Canadian Antiquarian and Numismatic Journal.* viii., Pt. 3.

8. *Journal of the Royal Society of Antiquaries of Ireland.* xli., Pt. 3.

9. *Monatsblatt der Numismatischen Gesellschaft in Wien.* No. 339.

10. *Numismatist.* October, 1911.

11. *Numismatische Zeitschrift*, 1911. Part 1.

12. *Proceedings of the Cambridge Antiquarian Society.* lix. and lx.

13. *Revue Numismatique*, 1911. Pt. 3.

14. *Rivista Italiana di Numismatica*, 1911. Pt. 3.

15. *Transactions of the Japan Society*, vol. ix.

Mr. F. A. Walters exhibited a half-angel of the first coinage of Henry VII of which only three specimens appear to be known.

Rev. E. Rogers showed a series of Parthian drachms of Mithradates II, Phraates IV (new portrait), Phraates and Musa, Vonones I (unpublished reverse, Victory to l. instead of r.), Artabanus IV (unpublished portrait, tentatively

attributed to this monarch), Osroes (a fine specimen of this rare coin), and a copper coin of Volagases II with rev. Tyche turreted.

Mr. L. A. Lawrence showed a series of long-cross pennies.

Mr. C. T. Seltman exhibited a silver stater of Metapontum of peculiar fabric which he believed to bear a Phoenician inscription.

Mr. H. B. Earle Fox exhibited the following Greek bronze coins, all apparently unpublished:—

1. Athens. Triptolemos in car drawn by dragons to l.; Rev. AΘ. Two owls, face to face, in wreath of olive; between them, *plemochoë*.

2. Athens of Imperial times. Rev. Herakles *μύσσης*, holding branch in r. hand; and in l. club, which rests on altar. (A very rare type, of which no satisfactory specimen has been published.)

3. Corinth (Roman colony). Domitian. Rev. Female figure, wearing diplois and chiton, standing to l.; l. arm rests on column; extended r. hand holds uncertain object.

4. Corinth (Roman colony). Domitian. Rev. Figure, apparently female, standing to r.; l. hand rests on long trident; r. hand hangs down and holds uncertain object. (Apparently unpublished.)

5. Corinth (Roman Colony). Hadrian. Rev. Emperor, holding simpulum, to l.; before him flaming altar. (Apparently unpublished. Mr. Earle Fox published this same reverse associated with obverse head of Aphrodite (or Lais), from a coin in the Paris collection, which he attributed to the time of Hadrian (*Journal International*, 1903).)

6. Corinth (Roman colony). Hadrian. Rev. Concordia, "Corint. et Patr." The two cities as nymphs sacrificing. (Known hitherto only from Leake's *Num. Hell.*, where an *electrotype* is described.)

7. Achaean League. *Patrae*. Usual types with ΑΧΑΙΩΝ ΠΑΤΡΕΩΝ; in exergue ΣΙΜΩ - - No coins of Patrae of

copper of the league have yet been published, although the silver is very common.

8. Lacedaemon. Bearded head r., showing marked individuality and evidently a portrait, not the usual conventional head of Herakles. *Rev.* Λ Α. Club and magistrate's name. Possibly a portrait of Eurycles.

Mr. C. T. Seltman read a paper on "The Influence of Agathocles on the Coinage of Magna Graecia," in which he called attention to a number of coins of Metapontum and Velia bearing the triskeles, the symbol of Agathocles, and presumably struck by him. Among the coins described by Mr. Seltman was one of Metapontum with obverse type of a barbarous style, bearing a legend which he believed to be Phoenician, and explained as such. Sir Arthur Evans pointed out that the inscription was really Greek, being ΔΕΞ written retrograde, a reading which was supported by Mr. Earle Fox. (This Paper is published in this volume, pp. 1-13.)

Mr. H. A. Grueber read an account of a find of long-cross pennies recently made at Palmer's Green which threw additional light on the chronology of the period. (This paper is published in this volume, pp. 70-97.)

DECEMBER 21, 1911.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A., President,
in the Chair.

The minutes of the last meeting were read and approved.

The following Presents received since the last meeting were announced and thanks were ordered to be sent to the donors:—

1. A rupee of Śiva Simha, King of Assam. *Presented by the Government of Eastern Bengal and Assam.*

2. Journal of Hellenic Studies. xxxi., Pt. 2.

3. Monatsblatt der Numismatischen Gesellschaft in Wien. No. 340.

4. Numismatist. November, 1911.

5. Proceedings of the Society of Antiquaries of London. xxiii., Part 2.

Mr. Luther Clements was elected a Fellow of the Society. Messrs. Cumberland Clark, Herbert A. Druce, R. H. Forster, F.S.A., Newton H. Harding, and G. Hamilton Smith were proposed for election.

Sir Arthur Evans exhibited a series of coins illustrating his paper on "Artistic Engravers of Terina," &c.

Mr. Henry Garside exhibited some recent Colonial issues.

Mr. Webb showed a series of Roman tesserae, on which Mr. Messenger read a brief paper.

Sir Arthur Evans read a paper on "The Artistic Engravers of Terina and the Signature of Evaenetos on its Later Didrachm Dies." The first part dealt with the works signed Φ and Γ , the view that these were engravers' signatures being maintained. Stress was laid on the pictorial method visible in the work of Φ at Terina and Pandosia—strikingly illustrated by the detailed background of the fountain scene, and by the instantaneous element in such compositions as the Nymph on the hydria, and the hunter, Pan, slipping the leash off his hounds. It was natural, in this and other features, such as the facing head of Hera, to trace the influence of Zeuxis, already invoked by Lenormant in this connexion. On the didrachm of Pandosia signed Φ the inscription on an ithyphallic term hitherto given as $MAAY\Xi$ was shown to read $[\Phi]A\Lambda\Lambda\Omega N$, and the symbol was therefore apparently the "canting badge" of a magistrate. In the case of Γ the suggestion of works of Attic sculpture, such as those of the balustrade of the Temple of Nikê Apteros, was undoubted, but one version of his Nikê Terina was directly derived from a coin-type of Elis.

In the "rich" style of the later didrachms of Terina, struck shortly after 400 B.C., Syracusan influence becomes dominant—the direct result of Dionysius's campaigns from 391 onwards.

The head of Nikê Terina on the earlier of these shows the impress of Kimôn's latest "medallion" style. The heads on the others at once recall those of the decadrachms of Evaenetos. The extraordinarily fine condition of a specimen from a recent South Italian find had now enabled Sir Arthur Evans to detect the actual signature EYA in microscopic characters on the band above the forehead of the seated nymph. This discovery supplies the first example of the signed work of a Silician artist at an Italian mint. A somewhat later variety of this class, exhibiting a crab—the Brettian symbol—in the exergue, had been with great probability referred by Dr. Regling, in his recent monograph on the coins of Terina, to the date of its occupation by the Brettii—356 B.C. It was now shown that the crab and the monogram E behind the obverse head had been inserted on an old die dating from the Dionysian period. (This Paper is printed in this volume, pp. 21-62.)

JANUARY 18, 1912.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A., President,
in the Chair.

The minutes of last meeting were read and approved.

Messrs. Cumberland Clark, Herbert A. Druce, and R. H. Foster, F.S.A., were elected Fellows of the Society.

The following Presents received since the last meeting were announced, and thanks were ordered to be sent to the donors :—

1. de Jonghe, Vicomte B. : Quelques Monnaies d'Anne de la Marck. *Presented by the Author.*
2. Sambon, G. : Repertorio Generale delle Monete Coniate in Italia, &c., 1912. *Presented by the Author.*
3. Archaeologia Aeliana. New Series, vii.
4. American Journal of Archaeology. xv., 4.

5. American Journal of Numismatics. xlv. (1911).

6. Bulletin of the Archaeological Institute of America, 1911; September and December.

7. Bulletin de l'Academie Royale de Belgique, 1911. Nos. 9-11.

8. Bulletin de Correspondence Hellénique, 1911; 5-12.

9. Monatsblatt der Numismatischen Gesellschaft in Wien. No. 341.

10. Numismatist. November, 1911.

11. Numismatic Circular, 1911. *Presented by Messrs. Spink & Sons.*

12. Revue Belge de Numismatique, 1912. Pt. 1.

Mr. Henry Garside exhibited a replica in copper of the gold badge of office worn by the Lord Provost of Glasgow, struck by Joseph Moore of Birmingham from the designs of Mr. D. Cunninghame.

Mr. W. E. Marsh showed a sixpence of James I with date 1609 and mint-mark coronet, a hitherto unknown combination which limits the date of issue of this coin to March 25-May 17, 1609.

Mr. L. A. Lawrence, F.S.A., exhibited a unique silver half-crown of the second issue of James I with mint-mark lis, plain harp, and with semicolon stops on obverse, and pellets on reverse; and a profile groat of Henry VII with mint-marks, *obv.* lis, *rev.* greyhound's head.

Mr. F. A. Walters, F.S.A., showed three pennies of the first coinage of Henry VII of London (mint-mark rose and lis), Canterbury (tun), and Durham (cross), all of the highest rarity.

Mr. Bernard Roth, F.S.A., exhibited a rare gold stater of the Iceni (Evans, XXIII-I).

Mr. G. C. Brooke exhibited a heavy noble (118.4 grs.) of Henry IV (belonging to Mr. Spink) and a light noble (103 grs.) of the same reign (belonging to Mr. Lawrence) both struck from the same obverse die, which has broken annulets

in the legend and had a slipped trefoil punched on the side of the ship before the striking of the light noble. Both these pieces have since been acquired by the British Museum.

Mr. H. A. Grueber read a paper on the "Quarter-Angel of James I." This piece, which was recently presented to the British Museum, has been hitherto unknown. In addition to being the only quarter-angel known of James I, it is the only piece that has so far survived of the first issue of angels, half and quarter-angels. The king is entitled AN. SC. FR. & HIB. REX instead of MAG. BRIT. FR. & HIB. REX, which was ordered to be adopted in October, 1604. The reverse bears the royal shield instead of the usual ship. (This Paper is printed in this volume, pp. 213-222.)

Mr. G. C. Brooke read a paper on "The Tax called *Monetagium* and the sequence of Coin-Types of William III." He pointed out the fallacy of assuming that *Monetagium* in England was the same as in Normandy, and emphasized the different monetary conditions prevailing in the two countries. It was quite wrong to assume, as had been done by some writers, that the monetagium tax could be made a basis for dating coin-types. (This portion of the Paper is printed in this volume, pp. 98-106.) Mr. Brooke proceeded to show that a study of the lettering on William's coins tended to prove that his "two stars" type (Hkns. 250) preceded his "crosses pattée and fleury" type (Hkns. 247). An overstrike of a Thetford coin of the "crosses pattée and fleury" type on a two stars type confirmed this.

FEBRUARY 15, 1911.

H. A. GRUEBER, Esq., F.S.A., Vice-President, in the Chair.

The minutes of last meeting were read and approved.

Messrs. Newton H. Harding and G. Hamilton Smith were elected Fellows of the Society, and Messrs. Hubert A. Druce and R. E. Forster were admitted.

The following Presents to the Society were announced, and thanks were ordered to be sent to the donors :—

1. Catalogue of the International Exhibition of Contemporary Medals. *Presented by the American Numismatic Society.*

2 (a). Demole, E. : L'Accord de Skathagen et la Médaille frappée à cette occasion.

(b). Demole, E. : La Première Monnaie d'Or de Neuchatel.

(c). Demole, E. : Les Collections Orientales de Henri Murser à Charlotten fils. *Presented by the Author.*

3. Farquhar, Miss H. : Portraiture of our Stuart Monarchs on their Coins and Medals. Pt. iii. *Presented by the Author.*

4. Gnechi, F. : I Medaglioni Romani. 3 Vols. *Presented by the Author.*

5. Maurice, J. : Numismatique Constantinienne. Vol. ii. *Presented by the Author.*

6. Ogden, W. S. : Shakespeare's Portraiture on Medals ; and a Medal of Shakespeare designed by Mr. Ogden ; both presented by him.

7. Numismatist. January, 1912.

8. Proceedings of the Royal Irish Academy. xxix., No. 9.

9. Revue Numismatique, 1911. Pt. 4.

10. Revue Suisse de Numismatique. xvii., Pt. 3.

11. Rivista Italiana di Numismatica, 1911. Pt. 4.

12. Zeitschrift für Numismatik. xxviii., Pts. 1 and 2.

Mr. J. Grafton Milne exhibited an undated Alexandrian tetradrachm of Vespasian, apparently a mule with an obverse from the die for the bronze coinage and a reverse for the billon.

Mr. F. A. Walters, F.S.A., showed a heavy noble of Henry IV of the Calais Mint (119·4 grains) having a flag at the stern of the ship and a coronet mint-mark on the rudder, of which only two other specimens are known.

Mr. Percy H. Webb exhibited a third brass of Gallienus : *obv.* GALLIENVS AVG, with radiate bust r. ; *rev.* IO CANTAB, Jupiter standing r., holding thunderbolt in r. and spear in l. The reverse legend is an abbreviation for IOVI CANTABRORVM.

Mr. Bernard Roth, F.S.A., showed a rare gros d'argent of Henry V, and two moutons d'or of Henry V and two of Charles the Dauphin; also a series of ancient British and Roman coins and fibulae and a late Bronze Age torque found at Peterborough.

Mr. Henry Garside exhibited the new rupee of British India of George V.

Mr. L. A. Lawrence, F.S.A., showed a large bronze plaque with busts of Charles IV of Spain, his queen, and their six children, which appears to be quite unknown.

Mr. Lionel M. Hewlett read the fourth portion of his treatise on Anglo-Gallic coins, which dealt with those struck by Henry V in Normandy. The earliest of these was probably the rare demi-gros or guénar, which Mr. Hewlett considers may have been struck at Caen, where Henry stayed for some months to organise the government of Normandy before proceeding to lay siege to Rouen. Immediately after the fall of Rouen, Henry struck moutons in gold and gros in silver there. On September 25, 1419, he ordered that all coins struck for the future should bear the letter H in the centre of the cross on the reverse. He opened a second Mint at St. Lô on April 14, 1420. The mint of issue was designated in the manner usual in France at that time, by placing a pellet under a certain letter of the legends. At first, Henry used the same mint-mark for Rouen as that adopted by Charles VI, but after the opening of the mint at St. Lô he placed a pellet below the first letters of the legends to designate the Rouen Mint and below the second letters of the legends to designate the St. Lô mint. The mouton with four fleurs-de-lis in the angles on the reverse which has been ascribed to Henry V on the strength of Poullain's manuscript should be ascribed to Charles the Dauphin, who struck it at the mints of the Dauphiny. (This Paper is printed in this volume, pp. 179-212.)

MARCH 21, 1912.

H. A. GRUEBER, Esq., F.S.A., Vice-President, in the Chair.

The minutes of last meeting were read and approved.

The following presents received since the last meeting were announced, and the thanks of the Society were ordered to be sent to the donors.

1. (a) Laffranchi, L. : Un Centenario Numismatico nell Anticheto.

(b) Laffranchi, L. : Agrippa e Macriano.

(c) Laffranchi, L. : Contributi Corpus della Falsificazioni (2 parts). *Presented by the Author.*

2. Bulletin de l'Academie Royale de Belgique, 1911, 12; 1912, 1.

3. Finska Fornminnesforeningens Tidskrift. xxv.

4. Numismatist. March, 1912. \

5. Proceedings of the Society of Antiquaries of Scotland, 1910.

6. Transactions of the Yorkshire Numismatic Fellowship. Vol. i., Pt. 2.

Mr. Grueber read a Paper on the "Buildings of the Forum as illustrated by Coins." Having distinguished between the different kinds of *fora* which existed in Rome, the writer gave a brief account of the early history of the Great Forum and its gradual development, fixing the date of erection of many of the edifices, vestiges of which remain to the present day. For his illustrations, with one exception, he selected coins of the period of the Republic. These supplied amongst others figures of the Sacellum of Venus Cloacina, the Basilica Aemilia, the fountain Juturna, the Temple of Vesta, the Rostra, the Puteal Scribonianum, and the Temple of Julius Caesar. A coin of Nero was employed to supply an illustration of the Temple of Janus, which is supposed to have been the first one erected in the Forum, and does not appear on earlier pieces. Mr. P. H. Webb exhibited a series of

Republican denarii illustrative of the paper, and Mr. Walters showed a sestertius of Hadrian, *rev.* Temple of Venus and Roma, said to have been designed by the Emperor himself, and to have stood in the Forum.

APRIL 18, 1912.

PERCY H. WEBB, Esq., Treasurer, in the Chair.

The minutes of last meeting were read and approved.

The following Presents received since the last meeting were announced, and thanks were ordered to be sent to the donors.

1. Stapleton, H. E.: Catalogue of the Provincial Cabinet of Coins in Shillong. *Presented by the Government of Eastern Bengal and Assam.*

2. American Journal of Numismatics. xlvi., Pt. 1.

3. American Journal of Archaeology. xvi., Pt. 1.

4. Bonner Jahrbücher. Vol. 120, Pts. 1-3.

5. Bonner Jahrbücher. Suppl. to Vol. 120.

6. Monatsblatt der Numismatischen Gesellschaft in Wien. No. 344.

7. Numismatist. April, 1912.

8. Proceedings of the Cambridge Antiquarian Society. lxi.

9. Revue Belge de Numismatique, 1912. Pt. 2.

10. Rivista Italiana di Numismatica, 1912. Pt. 1.

11. Suomen Museo. xviii.

Mr. J. Grafton Milne exhibited a copper coin of Julia Maesa struck at Aspendus, with *rev.* Serapis, Isis, and Demeter, and a copper coin of Claudius Gothicus struck at Sagalassos with *rev.* Boule and Demos.

Mr. Bernard Roth, F.S.A., showed a fine series of Anglo-Gallic coins of Henry VI, in gold, silver, and billon.

Mr. Lionel M. Hewlett read the concluding portion of his treatise on Anglo-Gallic coins, which comprised the coins

struck by Henry VI. These differed from the previous coins of the series in being regal instead of feudal. Henry II had struck coins as Duke of Aquitaine and Earl of Poitou; Edward III, although he claimed the throne of France, struck coins as Duke of Aquitaine only, and similarly Henry V struck coins as Duke of Normandy; but Henry VI was *de facto* King of France and struck coins as such from the French Regal Mints. The coins struck at the Dijon mint were issued by the Duke of Burgundy from dies prepared locally. The coins of Henry VI consist of a Salute and Angelot in gold, a grand blanc and petit blanc in silver, a tresin, denier tournois, denier parisis, and maille tournois in billon.

MAY 18, 1912.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A., President,
in the Chair.

The minutes of last meeting were read and approved.

The following Presents received since last meeting were announced, and thanks were ordered to be sent to the donors.

1. Blanchet, A.: *Notices Extraites de la Chronique de la Revue Numismatique*, 1912. Pt. 1.

2. Serafini, C.: *Le Monete et le Bolle Plumbee Pontificie del Medagliere Vaticano*. Vol. ii. *Presented by the Author*.

3. *Bulletin de l'Academie Royale de Belgique*, 1912, 2 and 3.

4. *Bulletin de Correspondence Hellénique*. xxxvi. (1912), Pt. 1.

5. *Monatsblatt der Numismatischen Gesellschaft in Wien*. No. 345.

6. *Numismatist*. May, 1912.

7. *Revue Numismatique*, 1911. Pt. 1.

Mr. L. G. P. Messenger exhibited a bronze coin of Severus Alexander, which he believed to be a double

sestertius, as it was nearly double the weight of the sestertius of the period.

Mr. H. Alexander Parsons exhibited a sovereign with name of Henry VIII, which he would attribute to Edward VI, as it had the purely Roman letters and the cinquefoil stops ; and four testoons of Edward VI with mint-mark bow, but with the TIMOR, &c., instead of the INIMICOS, &c., legend, with mint-mark rose of 1549, with legends reversed, with mint-mark *obv.* pheon, *rev.* arrow, and with mint-mark Y of 1550.

Mr. F. A. Walters, F.S.A., exhibited a penny of Stephen of Hawkins type, No. 268, of the Bedford Mint, reading ALPINE ON BEI.

Mr. L. A. Lawrence, F.S.A., showed a shilling of Charles I with mint-mark negro's head on both sides, and shield with plume on reverse.

Mr. W. E. Marsh exhibited two half-crowns of Queen Victoria, 1871, of the ordinary Wyon type ; the Royal Mint has no record of an issue of half-crowns in that year.

Mr. Henry Garside exhibited the new Indian rupee of George V with the improved design of the elephant on the king's pendant, and a British Imperial bronze farthing of 1877, not struck for circulation.

Mr. Henry Symonds, F.S.A., read a paper on " Edward VI and Durham House," in which he was able to prove the existence of a working mint during the reign of Edward VI in the Strand palace of the Bishop of Durham. He attributed the coins of Henry VIII and Edward VI bearing the mint-marks, bow, grappling-iron, and swan, to John Bowes at this mint, and not to Martin Bowes at the Tower, and proposed an interesting explanation of the *Redde Cuique*, &c., legend on certain debased coins.

JUNE 20, 1912.

ANNUAL GENERAL MEETING.

PERCY H. WEBB, ESQ., Treasurer, in the Chair.

The Minutes of the Annual General Meeting of June 16, 1911, were read and approved.

Messrs. Henry Symonds and H. W. Taffs were appointed scrutineers of the ballot for the election of the Council and Officers.

Mr. Harold Mattingly was elected a Fellow of the Society.

The following Report of the Council was then read and laid before the meeting :—

The Council have again the honour to lay before you their Annual Report as to the state of the Royal Numismatic Society.

It is with deep regret that they have to announce the death of the following Honorary Fellow :—

Conferentsraad C. F. Herbst, formerly Director of the Museum in Copenhagen,

and of the following seven Fellows :—

Sir Charles Bennet Lawes-Wittewronge.

Rev. S. Maude, M.A. Major-Gen. F. W. Stubbs, R.A.

Max Rosenheim, Esq., F.S.A. John Ward, Esq., F.S.A. •

Frederick Seeböhm, Esq., Warwick Wroth, Esq.

F.S.A., LL.D., D.Litt.

They have also to announce the resignation of the following seven Fellows :—

Rev. Edwin Burton.

J. S. Pitt, Esq.

Robert Day, Esq., F.S.A.,

H. J. Selby, Esq.

Major R. P. Jackson.

W. S. Talbot, Esq., I.C.S.

A. W. Page, Esq., F.S.A.

On the other hand, they have much pleasure in announcing the Election of the following ten Fellows :—

Cumberland Clark, Esq.	Fred. W. Jones, Esq.
Luther Clements, Esq.	Harold Mattingly, Esq., M.A.
Hubert A. Druce, Esq.	E. S. G. Robinson, Esq., B.A.
R. H. Forster, Esq., M.A., LL.B., F.S.A.	Maurice Rosenheim, Esq. G. Hamilton Smith, Esq.
Newton H. Harding, Esq.	

The number of Fellows is, therefore :—

	Ordinary.	Honorary.	Total.
June, 1911	296	22	318
Since elected	10	—	10
	<hr/> 306	<hr/> 22	<hr/> 328
Deceased	7	1	8
Resigned	7	—	7
	<hr/> 292	<hr/> 21	<hr/> 313

The Council have to announce that they have awarded the Medal of the Society to Lieutenant-General Max Bahrfeldt, Dr.Phil., for his distinguished services to Roman Numismatics.

The Hon. Treasurer's Report, which follows, was then laid before the Meeting :—

STATEMENT OF RECEIPTS AND DISBURSE-
FROM JUNE, 1911,

Dr.		THE ROYAL NUMISMATIC SOCIETY IN ACCOUNT					
		£ s. d.			£ s. d.		
<i>To Cost of Chronicle—</i>							
Printing	.	224	8	10			
Plates and Illustrations	.	64	15	9			
		<hr/>			289	4	7
<i>To Books, &c.</i>	.	.	.	.	9	7	5
<i>To Lantern Expenses</i>	.	.	.	.	4	4	0
<i>To Rent, &c.</i>	.	.	.	.	41	12	5
<i>To Investments—</i>							
Purchase of £142 London and North Western Railway Co. 4% Consolidated Preference Stock at 104	.	.	.	.	149	6	9
<i>To Sundry Payments</i>	.	.	.	.	10	16	3
<i>Balance—</i>							
General Fund	.	204	19	3			
Research Fund	.	12	6	2			
		<hr/>			217	5	5
					£721	16	10
					<hr/>		

The Reports of the Council and of the Treasurer having been adopted, Mr. Webb presented the Society's Medal to Mr. Grueber, to be forwarded to General Bahrfeldt, who was unable to attend.

Mr. Webb drew attention to the great services that General Bahrfeldt had rendered to Roman Numismatics extending over a very long period, his first contribution having been published in 1874. General Bahrfeldt had long been an Honorary Fellow of the Society, and it was a pleasure to feel that the name of another distinguished foreign fellow-worker is to be added to the list of Medallists.

In accepting the Medal on behalf of General Bahrfeldt, Mr. Grueber said :—

MR. TREASURER, LADIES AND GENTLEMEN—

I must first express to you General Bahrfeldt's deep regret at not being able to be present here this evening to receive the Medal which the Council of the Royal Numismatic Society has awarded to him. He has, therefore, requested me to act as his sponsor. I need scarcely say that I am very glad in the circumstances to undertake that duty.

Naturally the first remark I must make is to thank you, Mr. Treasurer, for the complimentary terms which have accompanied your placing the Medal in my hands. What you have said bears the stamp of truth and fact, for there is no man living who has done more for Roman Numismatics than General Bahrfeldt. When his name was proposed at the Council for the Medal, I remarked that he had contributed some hundreds of articles, reviews, &c. This remark was questioned. However, I felt pretty sure of my statement, and I was correct, for in 1896, when he was elected an Honorary Member of the Swiss Numismatic Society, M. Stroehlin drew up a list of his writings, which numbered 932 separate articles and reviews. Since that date General Bahrfeldt's pen has been even more prolific, and I think the

number now is not far short of 1400, which includes his editorship of the *Numismatisches Literatur-Blatt*, a monthly publication. It would be quite impossible for me to give you even an epitomised list of his more recent productions: but I can tell you that he has assailed some of the most difficult problems of the Roman Republican coinage and generally with success. Before General Bahrfeldt sits down to write his treatise he provides himself with casts from every possible source of the coins which bear upon his subject. By these means he has made many startling discoveries, and broken down many traditions.

His knowledge of all the public collections in Europe and of many private ones is most extensive, and he told me when on a visit to London recently that when he once had seen a coin he never forgot it, and even if he did not make a note he recollected where he had seen it.

I owe General Bahrfeldt a deep debt of gratitude personally because he was so good as to read the proofs of my "Roman Republican Coins" and he saved me from many a blunder, which lack of intimate acquaintance with other collections than that of the British Museum would have led me into.

I will now read the letter which General Bahrfeldt has addressed to the Council of the Society.

Allenstein, May 20, 1912.

TO THE COUNCIL OF THE ROYAL NUMISMATIC SOCIETY,
LONDON.

Mr. H. A. Grueber has informed me that the Royal Numismatic Society of London has awarded me its Silver Medal for my work in the domain of the Coinage of the Roman Republic. As I have been for a number of years an Honorary Fellow of the Society, this new honour is specially gratifying to me, and I hasten to express my most heartfelt thanks to the Society for this appreciation of my work. I

must, however, not omit to say that in my work I have received the valuable aid of the Directors of the Public Collections in Great Britain, which include those of London, Oxford, Cambridge, and Glasgow, and much is due to their help that I have obtained some success in my studies.

With the expression of my thankfulness and deep esteem,

I am,

Yours faithfully,

(Signed) MAX BAHRFELDT, Dr. Phil.,

Lieut.-General and Commander of the 37th Division.

On account of the unavoidable absence of Sir Henry Howorth the customary President's address was not delivered.

The result of the ballot for the Council and Officers for the ensuing year was announced. The list is as follows :—

President.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A.

Vice-Presidents.

SIR ARTHUR J. EVANS, M.A., D.LITT., LL.D., PH.D.,
F.R.S., F.S.A.

BERNARD ROTH, ESQ., F.S.A., J.P.

Treasurer.

PERCY H. WEBB, ESQ.

Secretaries.

JOHN ALLAN, ESQ., M.A., M.R.A.S.

FREDERICK A. WALTERS, ESQ., F.S.A.

Foreign Secretary.

GEORGE FRANCIS HILL, ESQ., M.A.

Librarian.

OLIVER CODRINGTON, ESQ., M.D., F.S.A., M.R.A.S.

Members of the Council.

THOMAS BLISS, Esq.

G. C. BROOKE, Esq., B.A.

MISS HELEN FARQUHAR.

H. B. EARLE FOX, Esq.

HERBERT A. GRUEBER, Esq., F.S.A.

BARCLAY VINCENT HEAD, Esq., D.C.L., D.LITT., PH.D.

L. A. LAWRENCE, Esq., F.S.A.

J. GRAFTON MILNE, Esq., M.A.

LIEUT.-COL. H. WALTERS MORRIESON, R.A., F.S.A.

HENRY SYMONDS, Esq., F.S.A.